

MAR 1 1972

# DEALER CATALOG

WESTERN RADIO

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**ROHN<sup>®</sup>towers**  
And ACCESSORIES

WESTERN RADIO

1415 - India St., P.O. Box 790  
San Diego, Calif. 92101  
Phone 239-0361



YOUR INTRODUCTION TO . . .

# *The Finest Line of Towers and Accessories:*

# **ROHN®**

## **INCLUDED IN THIS CATALOG:**

Economy Towers	Peak Roof Mounts	Guying Assemblies
Packaged Towers	Flat Roof Mounts	Accessory Shelves
No. 6 Tower	Roof Mounts — Vent Mounts	Accessory Platforms
No. 20 Tower	Gable Mounts	Rotor Posts
No. 25 Tower	Chimney Mounts	Rubber Grommets
No. 6 Crank-Up Towers	Wall Mounts	Guy Rings
SD & HD Series Crank-Up Towers	Ground Mounts	Mast Clamps
Tower Trailers	Drive-In Base Plates	Lightning Arrestors
No. 25 Fold-Over Towers	Hinged Base Plates	Screw Hooks
No. 45 Fold-Over Towers	Concrete Base Plates	Screw Eye
Tripod Roof Towers	Mast Bases	Stand-Off Straps
Telescoping Masts	Adjustable House Brackets	Stand-Offs
Vent Pipe Masts	Universal Eave Brackets	Ground Rods & Wire
Galvanized Mast Tubing	Universal Side Arms	TV Guy Wire
TV Service Tables	Side Arm Mounts	
	Erection Fixtures	

*(Note: This is not a complete listing and is only  
a general source of reference. Please refer  
to the catalog pages for the complete line.)*



# Unarco-Rohn

Sold to

Division of  
Unarco Industries, Inc.

Western Radio  
1415 India St.  
San Diego, Ca. 92101

310 Quincy Street  
Reno, Nevada 89502  
Phone 702 322 9300

317-654-4491

Shipped to

Ron Patterson  
11381 Interim Farms Rd.  
El Cajon, Ca. 92020

Date

11/17/76

Shipping Ticket Number

10254

Customer Order Number

1701

Purchase Order Date

11/2/76

Our Order Number

Salesman

Shipped via

CME

Date shipped

11/17/76

F.O.B.

Reno

Terms

Quantity Back Ordered	Quantity Ordered	Quantity Shipped	Stock Number/Description	Unit Price	Amount
	1	1 ✓	HDX-48-LB		
	2	2 ✓	KB-8		

hvy dty ax tower

concrete base stubs







DATE	ORIG.	DEST.	CO	B	RI	EQUIP. NO.	SEQUENCE NO.
111776	C	18	16	1	DC	66	420

CONSIGNEE COPY 7 FREIGHT BILL NO.

7663496



TIME IN \_\_\_\_\_ TIME OUT \_\_\_\_\_

NO. PIECES \_\_\_\_\_

DRIVER \_\_\_\_\_

DEL. DATE \_\_\_\_\_

"THE INTERSTATE COMMERCE COMMISSION REQUIRES COLLECTION OF THIS BILL WITHIN SEVEN DAYS. ACCEPTANCE OF COLLECT SHIPMENTS CONSTITUTES OBLIGATION TO PAY FREIGHT CHARGES."

CONSIGNEE

RON PATTERSON  
11381 FUERTE FARMS RD.  
EL CAJON CAL

SHIPPER

ROHN MFG DIV UNARCO  
NS  
RENO NEV

CARRIER NAME	CARRIER PRO NO.	OUR REV.	INT. REV.	G. B. L. NO.	INT. AT	BEYOND ROUTING
NO. PCS.	DESCRIPTION OF ARTICLES	WT. ID	WEIGHT	RATE	CHARGES	
1	PC NX 30 INCH SECTIONS		287			
2	BDL HDWE NOI IS		36	M	2913	
3	SN R 10254 TOWERS/ MASTS, RADIO/ TV		323	AMT DUE	2913 COL	
<div>Page 1 of 1</div> <div># 178</div> <div>11-19-76</div>						

*Payable to #178*  
*11-19-76*

BILL TO

RECEIVED SHIPMENT IN GOOD ORDER

DATE

NO. OF PIECES

CONSIGNEE'S SIGNATURE



BIG L

RECEIVED SHIPMENT IN GOOD ORDER

10/10/82  
 10/10/82  
 10/10/82

3  
 5 BOX HOME NOT 12  
 1 BOX 30 INCH SECTIONS

553  
 24  
 593

WMT ONE  
 W  
 —

5373 CG  
 5872

LCS  
NO

DESCRIPTION OF MATERIALS

MATERIAL

WEIGHT

DATE

CHARGES

CARRIER NAME

CARRIER ADDRESS

CARRIER PHONE

CARRIER FAX

CARRIER NO.

CARRIER

REASON FOR RETURN

MEMO MAIL  
 NO

NON MAIL DIA RIVARCO  
 SHIPPER

LT CARON DVT  
 11/10/82 BUREAU RIVARCO  
 NON HATTENSON

COMMITTEE

11/10/82 C 10 12 1 00 00

450

UNIT NO

STOCKING CODE

PIECES

LOADED AND CHECKED BY

PIECES

UNLOADED AND CHECKED BY

O O O O

C O U N T

POLYMER COMPOSITION CODE

10/10/82

CART

PIECES

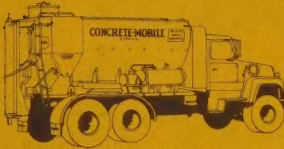


# JOB RECEIPT

STATE OF CALIFORNIA  
DEPARTMENT OF FOOD AND AGRICULTURE  
DIVISION OF MEASUREMENT STANDARDS  
WEIGHMASTER'S CERTIFICATE OF WEIGHT AND MEASURE

This is to Certify that the following described merchandise was weighed, measured or counted by a Public Weighmaster at Large and his signature is a recognized authority of accuracy as prescribed by the California Business and Professions Code, Division 5, Chapter 7.7.

287-2566



MAILING ADDRESS: **CONCRETE SUPPLY**  
6846 DEL PASO PLACE • SAN DIEGO, CALIFORNIA 92120

VEHICLE LICENSE NO. 1H69837 DATE 12-2-76

SOLD TO Ron Patterson

ADDRESS 11381 Fuente Farms Rd.  
El Cajon

QUANTITY	DESCRIPTION	PRICE	AMOUNT
<u>2 1/2</u>	<u>YARDS 3/4" 5 SAC MIX</u>	<u>29.50</u>	<u>73.75</u>
	<u>Load Change</u>		<u>10.00</u>
		TAX	<u>5.03</u>
ARR. JOB <u>145</u>	LEAVE JOB <u>220</u>	TIME ON JOB <u>35</u> min	TIME CHARGES <u>15</u> MINUTES @ <u>24.00</u> PER HR.
		TIME CHARGES TOTAL	<u>6.00</u>
		TOTAL	<u>94.78</u>

DIAMOND CONCRETE SUPPLY

PUBLIC WEIGHMASTER AT LARGE

BY: W. Bralton DEPUTY

4647

SALE NO.	READING FINISH
<u>AA 8025</u> <u>AA 824</u>	<u>PAID Check 2 0</u> <u>0. # 180.0</u>
	READING START

## UNITS DELIVERED

SUBJECT TO THE FOLLOWING CONDITIONS: ADDED INGREDIENTS

Purchaser assumes full responsibility for strength, slump and quality of concrete when additional water or other material is requested on job.

WATER  
SIGNED  
FOR BY

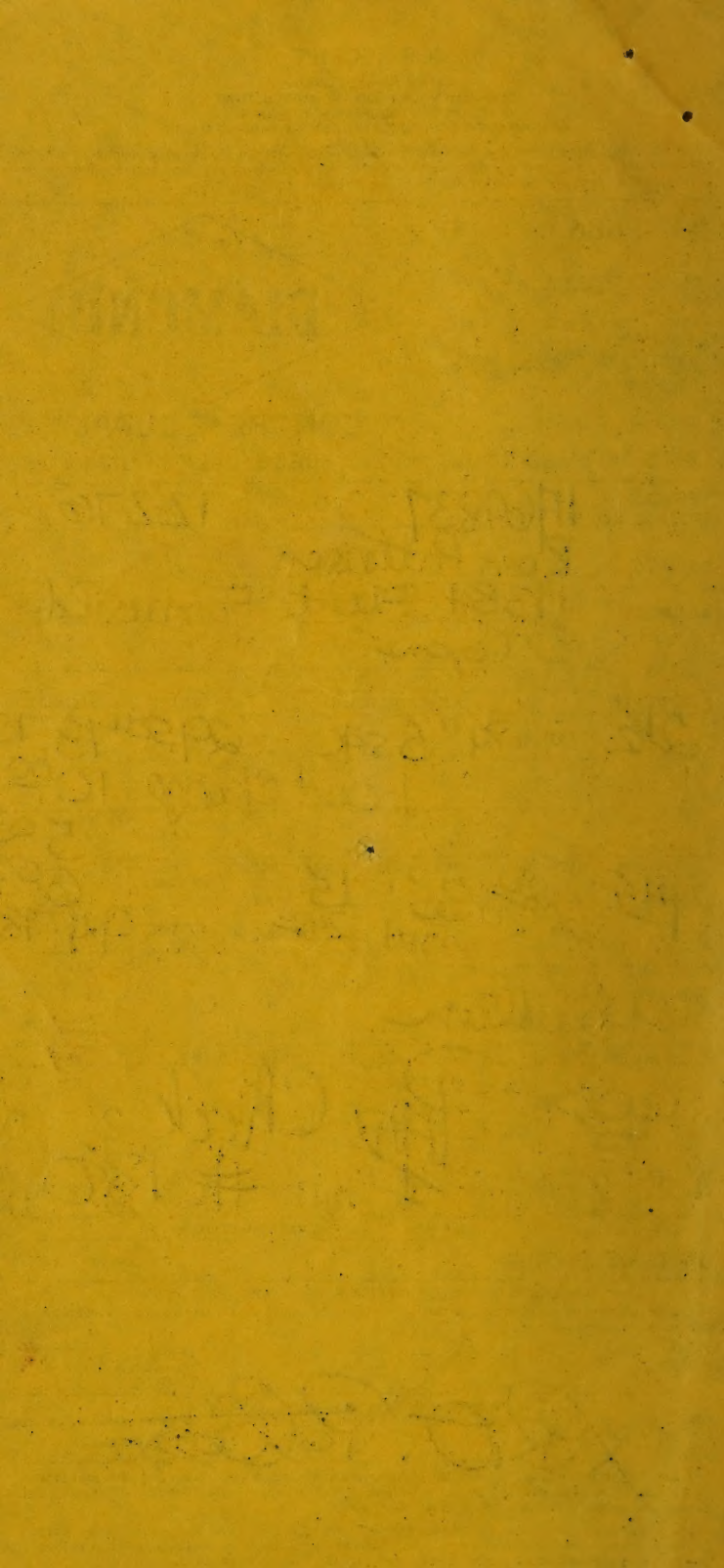
GALLONS  
OF WATER  
ADDED

ALL ORDERS ARE FOR STREET CURB DELIVERY  
I, the undersigned, will assume all responsibility for any damage resulting from deliveries made inside curb line.

Signature X R. O. Patterson  
Purchaser will be allowed eight (8) minutes per cubic yard free standing and/or unloading time. Excess time will be charged for at the rate of \$ \_\_\_\_\_ per hour. All deliveries are made to the best of our ability and dispatch. No claims for delays in deliveries will be allowed.

Notice is hereby given in accordance with Section 1193, California Code of Civil Procedure & 4210 California Government Code "That if bills are not paid in full for labor, services, equipment or materials furnished, the improved property (described hereon) may be subject to Mechanics lien."







# ROHN<sup>®</sup>

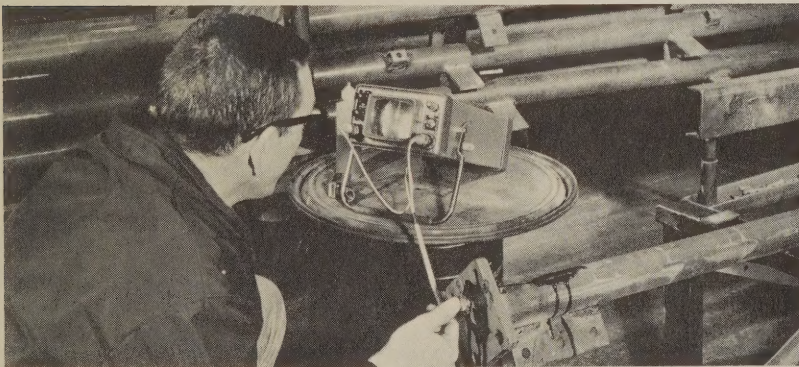
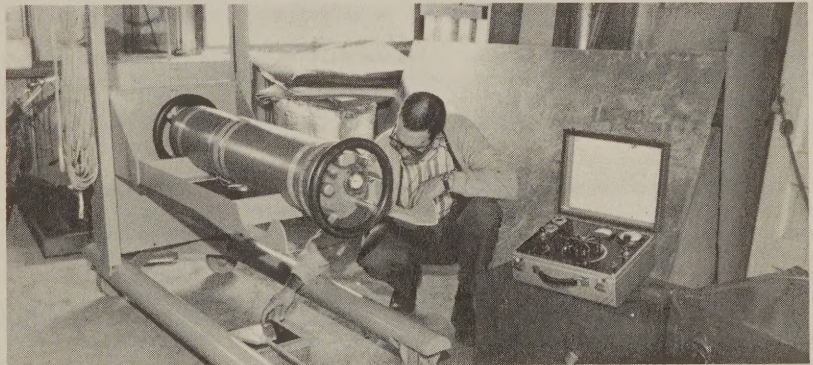
## QUALITY IS MORE THAN A WORD . . .

In a continuing effort to supply only the highest quality products, Rohn owns and operates 2 types of electronic and Xray equipment. The daily inspection of raw material **before** it goes into production

and the final inspection of the finished product assures that only the Highest Quality products carry the name . . . ROHN.

### INDUSTRIAL X-RAY

This remarkable unit, due to its versatility, enables Rohn Quality Control personnel to look "inside" material before or after fabrication, all the way from small welds up to 4" solids. Permanent film records are maintained for future reference.

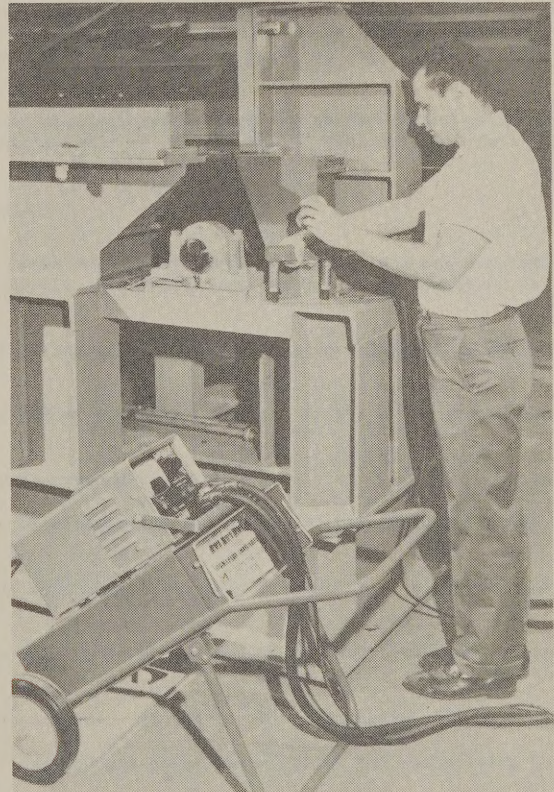


### ULTRASONICS

Another method of looking "inside" raw material or fabrications is this equipment which produces a "picture" on the oscilloscope screen as the "waves" penetrate and search out imperfections. Because the results are easily read directly from the scope, this method of inspection is used daily throughout the plant. Ultrasonics are unlimited as to the thickness of material through which they can "see."

### MAGNAFLUX

This is a dry powder-magnetic inspection process for detecting surface defects such as cracks, split seams, porosity, etc. This method produces a quick and positive visual inspection not only in weldments but for stress inspections and raw material as well.



*ROHN TAKES PRIDE IN HAVING A HIGHLY EFFICIENT QUALITY CONTROL TEAM.  
TO YOU, THIS MEANS BETTER PRODUCTS, AND GREATER RELIABILITY.*

## ROHN<sup>®</sup>

MANUFACTURING

DIVISION OF



• P.O. BOX 2000 / PEORIA, ILL. 61601

PRINTED IN U.S.A.







TERMS AND CONDITIONS RELATING TO ALL SALES

1. All quotations, proposals, prices, or other terms are made for acceptance within 60 days, and shipment within 60 days of purchase order date, unless otherwise stated, and are subject to change without notice; however, we invite your request for an extension. Also, they are subject to Credit and Marketing Department approval, prior to acceptance.
  2. Every effort will be made to maintain shipping schedules. However, we will not be liable for damages on account of any delays due to causes beyond our reasonable control. ROHN reserves the right to make partial shipments and to submit invoices accordingly.
  3. Changes or modifications to orders can be made only by written agreement executed by all parties affected thereby, which agreement shall include any price modification.
  4. ROHN's responsibility ceases upon delivery of all shipments to the carrier. Buyer is warned against receipting for merchandise until careful inspection has been made. Buyer must make all claims and report all damages and losses to the delivering transportation company. All merchandise leaving ROHN's factory has been carefully inspected and ROHN does not assume responsibility for damages or shortages which occur in transit.
  5. No federal, state, or local engineering costs or taxes are included in quoted prices. All quotations, proposals, prices or other terms are subject to increase without notification by the amount of any sales, excise or other tax levied or charged by any governmental agency and are subject to price adjustment in the amount expended by ROHN in compliance with any governmental action.
  6. Orders are not subject to cancellation by buyer except by written agreement with seller. Any order cancelled, after any work has been done by ROHN, such as engineering, production, etc., will have a cancellation charge, to be determined solely at the discretion of ROHN for whatever work has been performed, with a minimum of 10% of the purchase order price. If customer so chooses, he shall have the right to receive the material already performed at time of cancellation at the quoted price.
  7. Material received may not be returned by buyer except by written agreement with seller. In all cases, permission must be secured from ROHN prior to the returning of any goods for credit. All returned goods are subject to a minimum service charge of 20%, plus all transportation charges, and are subject to inspection by ROHN. ROHN reserves the sole right to determine amount of credit to be issued on all goods returned for credit. Only standard, currently manufactured ROHN products may be considered for return and credit.
  8. ROHN warrants the items of its manufacture only, to be reasonably fit for the purpose for which they are manufactured and sold; provided, however, that this warranty shall be effective only if purchaser installs all material according to ROHN's recommendations and specifications and that purchaser during the warranty period shall regularly, not less than semi-annually, inspect and properly maintain all items and forward copies of inspection and maintenance reports to ROHN. Any item found unfit for its purpose within 12 months from date of delivery will be repaired or replaced free of charge, F.O.B. ROHN's plant. ROHN shall be immediately notified in writing of such unfitness. ROHN reserves the sole right to determine if any material is to be repaired or replaced free of charge or to be supplied at ROHN's standard prices. Such obligation shall be limited to parts returned for inspection, properly packed and expenses prepaid, and providing inspection shall satisfactorily indicate defects. The warranty herein made is in lieu of all other warranties and, except as expressly stated herein, ROHN does not make and there are no warranties or obligations of any kind or nature whatsoever either express or implied including, but not restricted to, warranty or obligations as to design, material, workmanship or manufacture or as to the use of the items covered hereby. ROHN shall not under any circumstances be liable to third persons for any claims or damages including direct, special, indirect or consequential damages for any reason. The buyer agrees that it will hold and save ROHN harmless from any such claims or damages and shall indemnify ROHN for any expense, loss or damage in connection therewith.
- The above Warranty applies only to items manufactured by ROHN. Items not manufactured by ROHN are warranted and guaranteed only to the extent and in the manner warranted and guaranteed to ROHN by the manufacturer of such items and then only to the extent ROHN is liable to enforce such warranty or guaranty.
- Obstruction lighting equipment carries no warranty or guaranty of any kind.
- The above sets forth the only warranty made by ROHN in connection with items manufactured or sold by it, and any provisions in any proposals, specifications, advertising or other provisions hereof, are merely descriptive and are not to be construed as warranties made by ROHN.
9. ROHN reserves the right to change or modify the design and construction of any product manufactured by ROHN and to substitute material equal to or superior to that originally specified.
  10. No proposal, order, quotation or acceptance may be changed or varied by verbal agreement, and all orders are accepted only under the provisions set forth herein.
  11. Acceptance of all orders, quotations and proposals must be in writing and approved by ROHN.
  12. If outside source inspection is required prior to shipment of an order, 1% of material net price is chargeable, with \$50.00 as a minimum.
  13. Any welding inspection required by customer or customer's specifications must be done at ROHN's plant prior to shipment of material from ROHN's plant.
  14. No credits will be issued for any reason against a purchase order whose billing is more than 90 days old. Customer corrections or complaints must be made within this period of time.
  15. Standard catalog tower prices do not include special drawings or stress analyses. If any is required, there will be a charge.
  16. ROHN at all times reserves the right to take pictures of any or all of its products after installation for advertising purposes, except those which are under classified governmental control.
  17. On any request made to ship merchandise prepaid and to bill freight to the customer on products which are sold F.O.B. ROHN's plant, a charge of \$5.00, plus 1% of the freight invoice, will be billed to the customer for this service.
  18. A finance charge of 1½% per month will be billed on all accounts not paid within 30 days of invoice date.
  19. Minimum total net worth of merchandise which can be ordered is \$20.00. Any orders placed for less will be billed at \$20.00.
  20. Any purchase order ready for shipment, which is placed under a "hold order" by the customer for any reason, will be subject to a 1% per month storage charge from the date of the hold until the shipment is released.







ROHNINSTALLATION INFORMATION  
BRACKETED #25 and #45 TOWERS, NON-GUYED

BASE: The size of the concrete base for a 50' #25 tower, with a house bracket 12' aboveground, is 3' deep by 18" square. The base for a bracketed 50' #45 tower is 3' deep by 2' square. For cases of loose soil, etc., the base must be larger. Spread about 2" of gravel in bottom of hole prior to setting base section. After setting base section on gravel, being sure correct end is up, fill another 3" with gravel around legs of base. This allows the tower base legs to extend the required amount below the base of the concrete, thus allowing for drainage of moisture into the gravel. Level the base section as much as possible prior to pouring concrete, and repeat the process to make the tower plumb after pouring concrete. Do not pull base up into the concrete to level it and do not drive it hard into ground as this plugs leg holes and prevents moisture drainage. Crown the top of the concrete slightly to prevent water accumulation. Do not use drive rods as a base for tower when set in concrete.

HEIGHT OF TOWER & BRACKET USES: House brackets must be used and should be mounted at least 12' aboveground to be effective. The #45 tower should not extend more than 45' above a house bracket and a #25 tower should not extend more than 33' above a house bracket. To secure the house bracket, use lag screws no smaller than 3/8" x 2". A special effort should be made to locate the house bracket such that the lag screws go through the siding into a stud. Brackets fastened to the siding only will not hold in a high wind. Tighten the house bracket U-bolts only enough to prevent looseness. Do not dent or flatten the tower upright members by excessively tightening U-bolts.

BOLTS: Installers are urged to use a 10" lining-up punch that tapers from about 1/2" to 5/32" diameter over a 6 1/2" length. If bolts cannot be pushed through the holes with the heel of a hand while rocking the tower, do not hammer them through. Carefully drive the punch into the hole just enough to slightly enlarge it. The leg bolt hole should be just large enough to admit the bolt. **Never drill out the holes.** Be sure to tighten all leg bolts until they partially flatten the sleeves, causing the sleeves to actually grip the legs inside. Always replace stripped bolts. Upon completing an installation, there should be no vertical movement between tower sections at the joints when the tower is deliberately swayed from side to side.

MISCELLANEOUS: Installation is greatly hastened and simplified by the use of an erection fixture. Do not use it to lift more than the weight of one tower section at a time. If the antenna is to be fixed and a set screw used in the mast housing, or if a rotator is to be mounted on a short length of mast above the tower top section, install a TB-50 tower bushing at bottom of the mast housing to center the mast in the mast housing. These bushings are "peened" in place. If the rotator is to be mounted inside the top section of tower, do not install a TB-50 tower bushing at bottom of the mast housing.

All information is based upon average antennas, with not more than 2 square feet of area in a 20 PSF (70 MPH) wind load and a safety factor, with antenna installed at tower apex.

THESE ARE FACTORY TESTED INSTRUCTIONS.  
PLEASE FOLLOW CAREFULLY.



ROHNINSTALLATION INFORMATION  
BRACKETED #20 TOWER, NON-GUYED

BASE: The size of the concrete base for a 40' #20 tower, with a house bracket 12' aboveground, is 3' deep by 18" square. For cases of loose soil, etc., the base must be larger. Spread about 2" of gravel in bottom of hole prior to setting base section. After setting base section on gravel, being sure correct end is up, fill another 3" with gravel around legs of base. This allows the tower base legs to extend the required amount below the base of the concrete, thus allowing for drainage of moisture into the gravel. Level the base section as much as possible prior to pouring concrete, and repeat the process to make the tower plumb after pouring concrete. Do not pull base up into the concrete to level it and do not drive it hard into ground as this plugs leg holes and prevents moisture drainage. Crown the top of the concrete slightly to prevent water accumulation. **Do not use drive rods as a base for tower when set in concrete.**

HEIGHT OF TOWER & BRACKET USES: House brackets must be used and should be mounted at least 12' aboveground to be effective. The #20 tower should not extend more than 28' above a house bracket. To secure the house bracket, use lag screws no smaller than 3/8" x 2". A special effort should be made to locate the house bracket such that the lag screws go through the siding into a stud. Brackets fastened to the siding only will not hold in a high wind. Tighten the house bracket U-bolts only enough to prevent looseness. Do not dent or flatten the tower upright members by excessively tightening U-bolts.

BOLTS: Installers are urged to use a 10" lining-up punch that tapers from about 1/2" to 5/32" diameter over a 6 1/2" length. If bolts cannot be pushed through the holes with the heel of a hand while rocking the tower, do not hammer them through. Carefully drive the punch into the hole just enough to slightly enlarge it. The leg bolt hole should be just large enough to admit the bolt. **Never drill out the holes.** Be sure to tighten all leg bolts until they partially flatten the sleeves, causing the sleeves to actually grip the legs inside. Always replace stripped bolts. Upon completing an installation, there should be no vertical movement between tower sections at the joints when the tower is deliberately swayed from side to side.

MISCELLANEOUS: Installation is greatly hastened and simplified by the use of an erection fixture. Do not use it to lift more than the weight of one tower section at a time. If the antenna is to be fixed and a set screw used in the mast housing, or if a rotator is to be mounted on a short length of mast above the tower top section, install a TB-50 tower bushing at bottom of the mast housing to center the mast in the mast housing. These bushings are "peened" in place. If the rotator is to be mounted inside the top section of tower, do not install a TB-50 tower bushing at bottom of the mast housing.

All information is based upon average antennas, with not more than 2 square feet of area in a 20 PSF (70 MPH) wind load and a safety factor, with antenna installed at tower apex.

THESE ARE FACTORY TESTED INSTRUCTIONS.  
PLEASE FOLLOW CAREFULLY.



# Model No. 20G HOME TV TOWER

No. 20G

## THE IDEAL TOWER FOR MANY INSTALLATIONS

*Designed and engineered for 2 sq. ft. of antenna surface, this tower will handle most home TV installations. If larger antenna is to be used, step up to the heavier No. 25G tower.*

### FINISH

The No. 20G tower is **completely** Hot Dip Galvanized — after fabrication.

### 15 YEAR WARRANTY

Rohn backs this finish with the industries' FIRST and ONLY 15 yr. warranty\* against red rust under normal atmospheric conditions!

*\*Warranty does not include hardware.*

### PROVEN DESIGN

Built on a 12-1/2" equilateral triangle design, the high strength tubular legs are solidly joined by **solid steel** "zig-zag" cross members electrically welded and fabricated in Rohn developed production equipment. Each 10' tower section is complete with nuts and bolts included inside one leg.

### SUPERIOR STRENGTH

This is foremost at Rohn and is achieved by setting rigid high standards for raw materials and maintaining those standards thru the finished tower.

When quality materials are combined with precision manufacture and proven design, the result is a better product.

Accessories for No. 20G tower are same as for No. 25G tower — completely interchangeable!

### SELF-SUPPORTING HEIGHTS FOR NO. 20G TOWER

WIND LOAD	Factor of Safety—1.5		Factor of Safety—2.3	
	No Ant.	2 Ft. <sup>2</sup>	No Ant.	2 Ft. <sup>2</sup>
10.0 PSF (50 MPH)	64.0'	56.5'	49.9'	42.6'
14.4 PSF (60 MPH)	53.4'	46.0'	41.6'	34.5'
20.0 PSF (70.7 MPH)	45.3'	38.1'	35.4'	28.3'

*Shown above is a typical installation with concrete base and house bracket.*



**ROHN** MANUFACTURING

DIVISION OF



P. O. BOX 2000 • PEORIA, ILL. 61601



#20 TOWER  
ECONOMY HOME TV TOWER

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
20G	10' tower section	28.50	19.95	30
20AG	9' top section	30.85	21.60	26
BPC20G	Concrete base plate	14.30	10.00	13
3/4"x12" PP	Pier pin	2.50	1.75	1
	(for BPC20G - 1 required)			

1 1/4" legs - 12 1/2" triangle.

"Hot-dipped" galvanized after fabrication.

"Zig-Zag" construction with horizontal member on all three faces for climbing.

All #25 accessories fit above tower.

The #20 tower is not recommended for commercial, ham, or guyed installations.

NOTE: The price on #20 sections will be \$3.25 higher on shipments to the following states: Ariz., Calif., Idaho, Mont., Nev., Ore., Utah, Wash., Alaska, Hawaii, and Alberta, B.C., and Sask., Canada.

F.O.B. PEORIA, ILLINOIS - or - BIRMINGHAM, ALABAMA

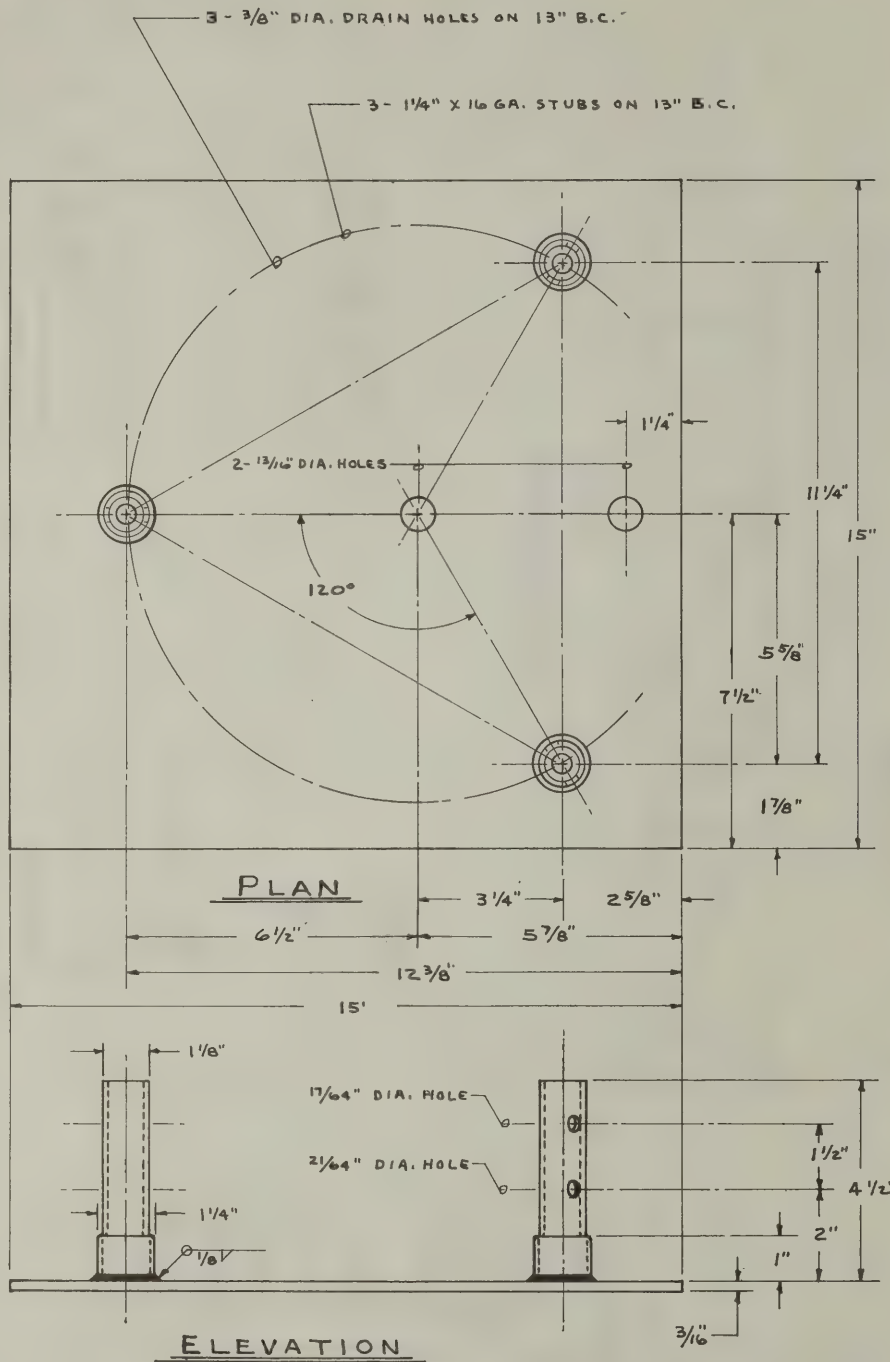
PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.





NO	DESCRIPTION	DATE	BY
REVISES			
<h1 style="text-align: center;">R O H N</h1> <h2 style="text-align: center;">MODEL 20 TOWER SECTION</h2>			
TITLE		THIS DRAWING IS THE PROPERTY OF ROHN, IT IS NOT TO BE LOANED, COPIED, REPRODUCED, OR USED IN ANY MANNER WITHOUT OUR WRITTEN CONSENT.	
SCALE	NOTED	1/4" = 1'-0" UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE GIVEN IN INCHES.	
DATE	REVISED	4-28-68 10-3-68 10-3-68	
BY	APPROVED	RAL C-680954	





NOTE: AFTER GALVANIZING, CHECK ALL HOLES AND OPEN IF PLUGGED.

BASE PLATE FOR CONCRETE PIER  
PART No.- BPC-20G

NO.	DESCRIPTION	DATE	BY
REVISIONS			
<b>ROHN</b>			
TITLE <b>BASE PLATE FOR MODEL 20 TOWER</b>			
THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.		FILE NO.	
TECH. NO.	MATERIAL	FINISH	HOT DIP GALV.
DATE	7-7-69	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE GIVEN IN INCHES	13/16"
DES. BY	ck	DATE	7-7-69
CHKD BY	ck	DATE	7-7-69
APPROVED	ck	DATE	7-7-69
DRAWING NO.		C-690707	





**No. 20G (rear)**

**No. 11G (front)**

**Each supporting same weight**

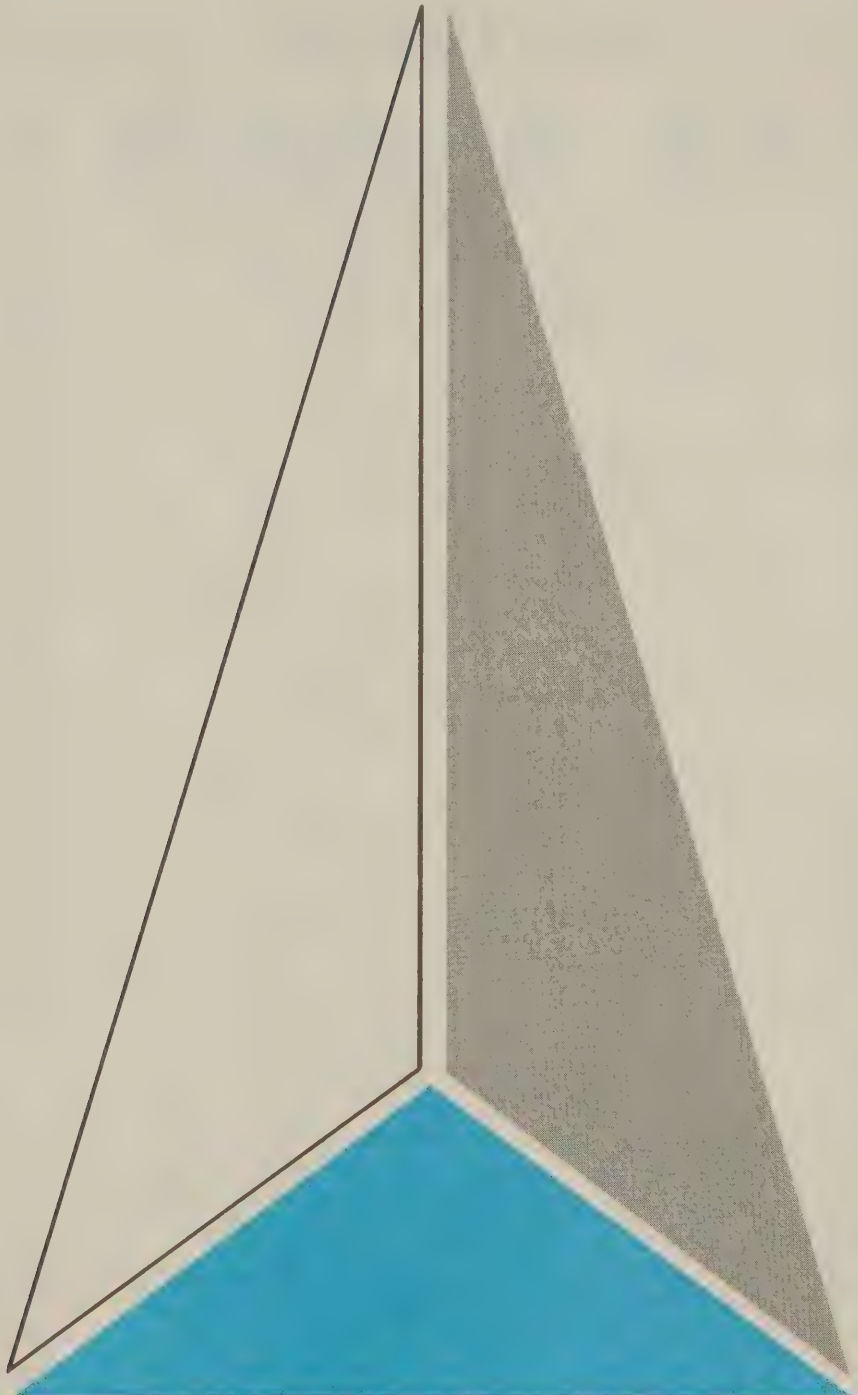






**ROHN-SPAULDING, INC.**

DIVISION OF



**SPAULDING**  
**SELF-SUPPORTING**  
**STRATO-TOWERS**

FOR HOME TV, FM, HAM RADIO INSTALLATIONS

# SPAULDING

## STANDARD AX SERIES

### FOR CEMENT INSTALLATION

All steel — heavily galvanized  
for long life.\*

All riveted construction — no  
welds to rust.\*

Compact Nested 48' Tower  
Package — Takes only  
2 sq. ft. floor space.\*

Complete tower — with base  
stubs, hardware, mast and  
mast kit. Available to 64'

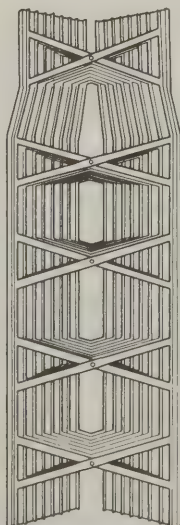
Greater width and weight  
at bottom — for greatest  
strength.\*

Easy to erect — the higher  
you go, the lighter the  
section.\*

Wind resistance decreases  
with height.\*

Rotators easily installed.\*

Tower is beautifully  
styled — adds to your home's  
appearance.\*



8' Sections

"X" Brace design gives  
greater strength — braces  
riveted in center as well as  
at ends.\*

New beaded channel leg design  
reduces amount of twisting.\*

No guy wires required —  
tower is self-supporting.  
Tower "Package" — compact  
shipping and storage method.  
Includes all necessary  
parts and hardware.\*

U.S. Patent No. 2806560

\*These features common to all  
Spaulding Strato Towers.

## X-CB Series

### CYLINDER BASE MODEL

Available to 48'

Immediate base setting.

No concrete required.

Easy to install.

Self-aligning hinge base.

Tower can be assembled  
on the ground and hinged  
up (see insert) or built  
vertically, section upon  
section.

Galvanized tower and base.

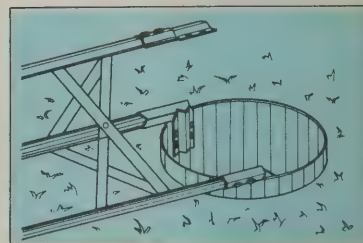
All riveted construction.

Beautiful design.

Extreme high strength —  
less wind resistance at top  
of tower due to design.

Beaded Channel Leg (will  
not rust inside like painted  
tubular type towers.)

Strato Towers also  
available with hinged  
concrete base, or screw  
anchor base.





# STRATO-TOWERS

## FOR EVERY HAM AND HOME TV INSTALLATION

*Strong  
Durable and  
Dependable*

**HDX**

### Ham Series

#### HEAVY DUTY HAM TOWER

Available to 48'

Can be used with  
concrete base stubs,  
screw anchor base, or  
hinged concrete base.

Package complete with  
heavy duty mast clamp,  
rotor plate and top  
plate assembly as shown.

Rotators easily adapted.

Physical properties and  
specification available  
on request.

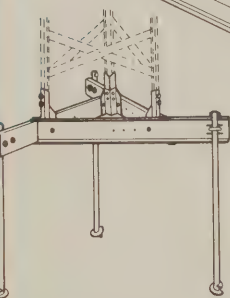
Due to heavier designing  
this Ham tower will  
withstand greater  
loading than standard  
towers or HAX Series.  
Top of HDX Series  
tower is 12-3/4" across  
one side of triangle.

**HDX**

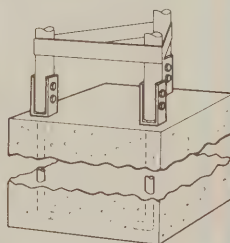
**HAX**

Top plate assembly with heavy  
duty mast clamp. (FL)

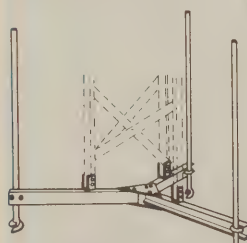
4' CONCRETE  
BASE STUBS



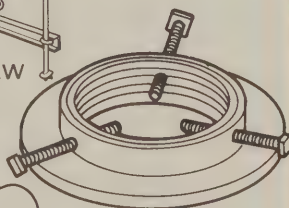
(XSAB-36) SCREW  
ANCHOR BASE



(XHC) HINGED  
CONCRETE BASE



(XSAB-78) SCREW  
ANCHOR BASE



FL- HEAVY DUTY  
MAST CLAMP



"T" WRENCH (TW-2)

See Catalog for Complete Details

### HAX Ham Series Towers

#### FOR STANDARD HAM INSTALLATIONS

Available to 56'

Can be used with  
Concrete Base Stubs  
Screw Anchor Base, or  
Hinged Concrete Base.

Package complete with  
heavy duty mast clamp,  
rotor plate and top  
plate assembly as shown.

Rotators easily adapted.

Physical properties and  
specification available  
on request.

This Ham tower will  
hold larger antennas  
than standard AX series  
towers. Top of HAX  
tower is 10-3/16"  
across one side of  
triangle.

**SPAULDING** SELF-SUPPORTING  
**STRATO-TOWERS**

## EP Series

### FOR BRACKETED INSTALLATIONS

Check this for price—  
Economy Package  
Tower.

An excellent tower for  
the economy minded  
person.

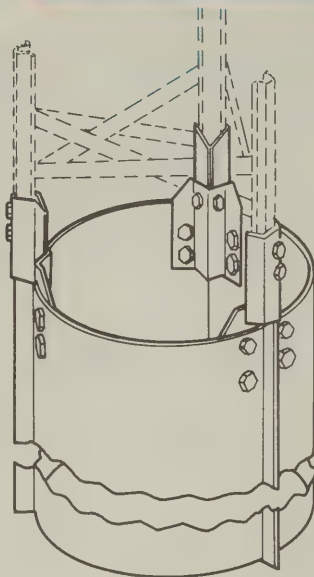
Made from the same  
quality materials as the  
standard AX series  
towers.

Tower size the same as  
the top two sections of  
the standard AX Series.

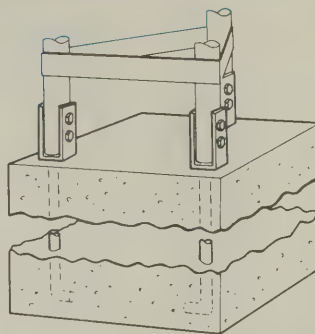
Higher quality than most  
competitive towers.

EP towers can be  
ground mounted with  
base plate furnished  
with the tower or roof  
mounted with the  
adjustable hinged roof  
mount (roof mount is  
extra accessory).

# TOWER ACCESSORIES



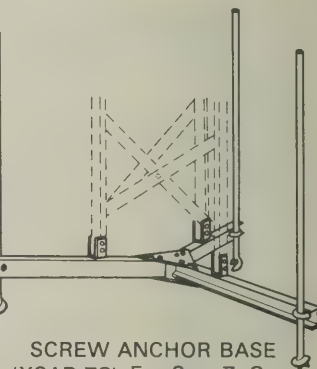
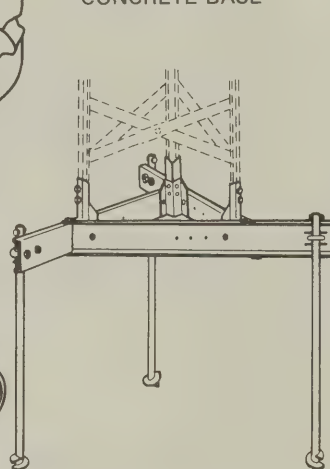
4' CYLINDER BASE  
(NO CONCRETE  
NEEDED)



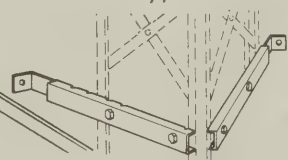
(XHC) HINGED  
CONCRETE BASE



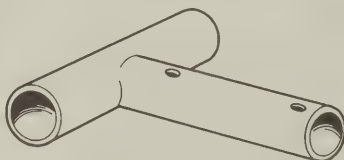
GUY BRACKETS



SCREW ANCHOR BASE  
(XSAB-78) For Sec. 7, 8.

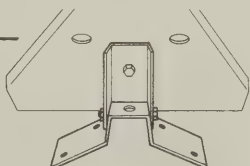


ADJUSTABLE HOUSE BRACKET  
\*(EPH-1) 4" to 18",  
(EPH-2) 8" to 24"

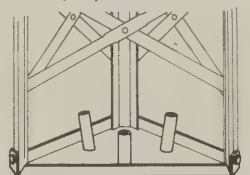


"T" WRENCH FOR  
INSTALLING SCREW  
AUGERS (TW-2)

SCREW ANCHOR BASE  
(XSAB-36) for Sec. 3,  
4, 5, 6.



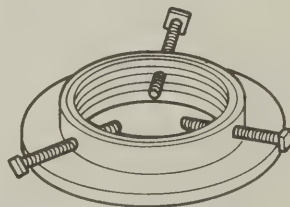
UNIVERSAL ROOF MOUNT  
(EPR-1) Optional Accessory



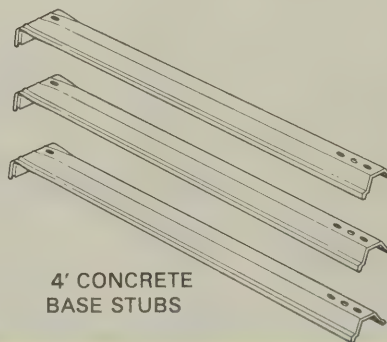
BASE PLATE \*(EPB-1)

3' Drive Pads \*(EPDR-1) \*(M-8) 8' Mast

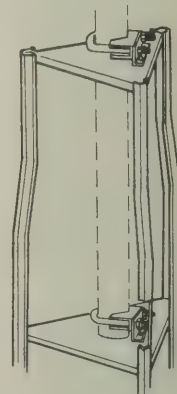
\*Included with all EP Towers



(FL)-HEAVY DUTY  
MAST CLAMP



4' CONCRETE  
BASE STUBS



(AX-MK2) MAST  
HARDWARE KIT

# ROHN-SPAULDING, INC.

DIVISION OF



P.O. Box 365 Frankfort, Indiana 46041

Peoria, Ill., Birmingham, Ala., Frankfort, Ind.



SPAULDING

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>8' AX SECTIONS</u>				
AX-1	Standard offset section	14.10	9.85	18
AX-1A	Offset top section w/XT-1, XR-1, AX-MK2	25.70	18.00	20
AXS-1	Straight section	14.45	10.10	18½
AX-2	Standard offset section	14.80	10.35	19
AX-2A	Offset top section w/XT-2, XR-2	21.35	14.95	22
AXS-2	Straight section	15.30	10.70	19½
AX-3	Standard offset section	18.80	13.15	24
AX-3A	Offset top section w/XT-3, XR-3	26.65	18.65	28
AXS-3	Straight section	21.00	14.70	27
AX-4	Standard offset section	21.95	15.35	28
AXS-4	Straight section	22.65	15.85	29
AX-5	Standard offset section	29.70	20.80	38
AXS-5	Straight section	31.20	21.85	40
AX-6	Standard offset section	32.65	22.85	42
AXS-6	Straight section	34.30	24.00	44
AX-7	Standard offset section	53.60	37.50	59
AXS-7	Straight section	56.35	39.45	62
AX-8	Standard offset section	59.00	41.30	65
AXS-8	Straight section	61.85	43.30	68
<u>AX ACCESSORIES</u>				
AX-MK2	Mast hardware kit w/rotor post for top & rotor plate	6.60	4.60	2
FL	Heavy duty mast clamp	5.45	3.80	3
EF-AX	12' aluminum erection fixture for all AX sections	96.60	67.60	22
H-AX	Head only for EF-AX	51.10	35.75	12
P-25-45	Pole only for EF-AX (or EF-25-45) *	51.10	35.75	10
USM	Universal side mount (28" - 40") w/4', 1½" OD mast (fits Sects. 1 thru 6 - recommend tower be guyed when using this mount)	15.70	11.00	14
<u>TOP AND ROTOR PLATES</u>				
XT-1	Top plate for Sect. AX-1 (8")	2.60	1.80	1
XT-2	Top plate for Sect. AX-2 (10 3/16")	3.35	2.35	1½
XT-3	Top plate for Sect. AX-3 (12 3/4")	4.00	2.80	2
XR-1	Rotor plate for Sect. 1 (10 3/16")	2.60	1.80	1
XR-2	Rotor plate for Sect. 2 (12 3/4")	3.35	2.35	1½
XR-3	Rotor plate for Sect. 3 (15")	4.00	2.80	2

Nuts and bolts included in section prices.

\* Same pole is used in both the Spaulding and Rohn erection fixtures.

F.O.B. FRANKFORT, INDIANA

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SPAULDING

AX ACCESSORIES

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>4' CONCRETE BASE STUBS (Set of 3)</u> <u>(Tower Height Not to Exceed 60 ft.)</u>				
XB-346	Stubs for Sect. 3, 4, 6 (3 3/8" x 14 ga.)	12.35	8.65	10
XB-5	Stubs for Sect. 5) (3 9/16" x 14 ga.)	12.35	8.65	11
XB-7	Stubs for Sect. 7 (4 1/2" x 12 ga.)	15.70	11.00	20
XB-8	Stubs for Sect. 8 (4 1/4" x 12 ga.)	15.70	11.00	18
<u>SELF-SUPPORTING 4' CYLINDER BASE (For Use Without Concrete</u> <u>With Mounting Hardware</u> <u>(Tower Height Not to Exceed 48 ft.)</u>				
XCB-2	For use w/Sect. 2	45.15	31.60	58
XCB-3	For use w/Sect. 3	47.45	33.20	61
XCB-4	For use w/Sect. 4	56.15	39.30	72
XCB-5	For use w/Sect. 5	62.85	44.00	81
XCB-6	For use w/Sect. 6	72.45	50.70	93
CBHK-25	Cylinder base hardware kit (Fits Sect. 2, 3, 4, 5)	19.70	13.80	8
CBHK-6	Cylinder base hardware kit (Fits Sect. 6)	19.70	13.80	8
<u>SELF-SUPPORTING SCREW ANCHOR BASE</u> <u>With Mounting Hardware</u> <u>(Tower Height Not to Exceed 64 ft.)</u>				
XSAB-36	For use w/Sect. 3, 4, 5, 6	54.20	37.95	69
XSAB-78	For use w/Sect. 7, 8	132.10	92.45	167
TW-2	"T" wrench for installing screw augers	10.70	7.50	8
<u>SELF-SUPPORTING HINGED CONCRETE BASE FOR ALL SECTIONS</u> <u>(Tower Height Not to Exceed 64 ft.)</u>				
XHC	Fits all sections	25.85	18.10	25
<u>GUY BRACKETS</u>				
GS-12	Guy bracket for Sect. 1, 2	6.70	4.70	3½
GS-45	Guy bracket for Sect. 4, 5	13.50	9.45	6
<u>MASTS</u>				
M-8	8' mast (1½")	2.60	1.80	6½
M-4	4' mast (1½")	1.60	1.10	3

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SPAULDING

SELF-SUPPORTING HOME TV AX TOWERS

<u>PART NO.</u>	<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>SELF-SUPPORTING AX TOWER</u> <u>WITH (XB) 4' CONCRETE BASE STUBS &amp; (M-8) 8' MAST</u>			
AX-24	70.45	49.30	73
AX-32	91.15	63.80	101
AX-40	119.30	83.50	139
AX-48	150.45	105.30	181
AX-56	204.80	143.35	250
AX-64	260.95	182.65	315

<u>SELF-SUPPORTING AX TOWER</u> <u>WITH (XCB) 4' CYLINDER BASE &amp; (M-8) 8' MAST</u>			
X-16-CB	84.30	59.00	104
X-24-CB	104.45	73.10	131
X-32-CB	133.30	93.30	170
X-40-CB	168.15	117.70	217
X-48-CB	208.15	145.70	271

NOTE: The price on AX & X-CB complete towers will be 10% higher on shipments to the following states: Ariz., Calif., Colo., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo., Alaska, Hawaii, and Alberta, B.C., and Sask., Canada.

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SPAULDING

SELF-SUPPORTING HOME TV AX TOWERS

<u>PART NO.</u>	<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>SELF-SUPPORTING AX TOWER WITH (XSAB) SCREW ANCHOR BASE &amp; (M-8) 8' MAST</u>			
X-24-SAB	110.85	77.60	132
X-32-SAB	131.60	92.10	160
X-40-SAB	159.70	111.80	198
X-48-SAB	190.85	133.60	240
X-56-SAB	315.95	221.15	397
X-64-SAB	372.10	260.45	462

<u>SELF-SUPPORTING AX TOWER WITH (XHC) HINGED CONCRETE BASE &amp; (M-8) 8' MAST</u>			
X-24-HC	83.85	58.70	88
X-32-HC	104.60	73.20	116
X-40-HC	132.80	92.95	154
X-48-HC	163.85	114.70	196
X-56-HC	214.95	150.45	255
X-64-HC	271.00	189.70	320

NOTE: The price on X-SAB & X-HC complete towers will be 10% higher on shipments to the following states: Ariz., Calif., Colo., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo., Alaska, Hawaii, and Alberta, B.C., and Sask., Canada.

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SPAULDING

HAM SELF-SUPPORTING AX TOWERS  
HAX SERIES

<u>PART NO.</u>	<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>HAM SELF-SUPPORTING AX TOWER WITH (XB) 4' CONCRETE BASE STUBS</u>			
HAX-32	103.35	72.35	122
HAX-40	134.50	94.15	164
HAX-48	188.80	132.15	232
HAX-56	244.95	171.45	297
<u>HAM SELF-SUPPORTING AX TOWER WITH (XSAB) SCREW ANCHOR BASE</u>			
HAX-32-SAB	143.80	100.65	180
HAX-40-SAB	174.95	122.45	222
HAX-48-SAB	299.95	209.95	378
HAX-56-SAB	356.00	249.20	443
<u>HAM SELF-SUPPORTING AX TOWER WITH (XHC) HINGED CONCRETE BASE</u>			
HAX-32-HC	116.85	81.80	137
HAX-40-HC	148.00	103.60	179
HAX-48-HC	198.85	139.20	237
HAX-56-HC	255.00	178.50	302

NOTE: The price on HAX, HAX-SAB & HAX-HC complete towers will be 10% higher on shipments to the following states: Ariz., Calif., Colo., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo., Alaska, Hawaii, and Alberta, B.C., and Sask., Canada.

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SPAULDING

HAM SELF-SUPPORTING AX TOWERS  
HDX SERIES

<u>PART NO.</u>	<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>HEAVY DUTY HAM SELF-SUPPORTING AX TOWER WITH (XB) 4' CONCRETE BASE STUBS</u>			
HDX-32	121.60	85.10	147
HDX-40	175.95	123.15	214
HDX-48	232.10	162.45	279
<u>HEAVY DUTY HAM SELF-SUPPORTING AX TOWER WITH (XSAB) SCREW ANCHOR BASE</u>			
HDX-32-SAB	161.95	113.35	205
HDX-40-SAB	287.10	200.95	360
HDX-48-SAB	343.15	240.20	426
<u>HEAVY DUTY HAM SELF-SUPPORTING AX TOWER WITH (XHC) HINGED CONCRETE BASE</u>			
HDX-32-HC	135.00	94.50	162
HDX-40-HC	186.00	130.20	229
HDX-48-HC	242.15	169.50	284

NOTE: The price on HDX, HDX-SAB & HDX-HC complete towers will be 10% higher on shipments to the following states: Ariz., Calif., Colo., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo., Alaska, Hawaii, and Alberta, B.C., and Sask., Canada.

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SPAULDING

BRACKETED HOME TV AX TOWERS (EP SERIES)

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>EP TOWER WITH DRIVE RODS, BASE PLATE, 8' MAST &amp; HOUSE BRACKET</u>				
EP-2	16' tower	56.15	39.30	62
EP-3	24' tower	69.80	48.85	80
EP-4	32' tower	84.30	59.00	99
EP-5	40' tower	98.80	69.15	118

EP ACCESSORIES

EPR-1	Universal roof mount	7.85	5.50	2
EPB-1	Base plate	4.00	2.80	2
EPDR-1	3' drive rods (set of 3)	4.00	2.80	7
M-8	8' mast (1½")	2.60	1.80	6½
EP-H1	Adjustable house bracket - 4" to 18" (Fits Sects. 1, 2, 3, 4)	7.85	5.50	5½
EP-H2	Adjustable house bracket - 8" to 24" (Fits Sects. 1, 2, 3, 4)	10.45	7.30	6½
GS-12	Guy bracket (Fits Sects. 1, 2)	6.70	4.70	3½

NOTE: The price on EP complete towers will be 10% higher on shipments to the following states: Ariz., Calif., Colo., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo., Alaska, Hawaii, and Alberta, B.C., and Sask., Canada.

ROOF MOUNT TOWERS

RM-4	4' tower
RM-4-8	4' tower w/8' mast
RM-8	8' tower
RM-8-8	8' tower w/8' mast

DISCONTINUED

SPAULDING

ORDER NO.	LIST	SUGG'D. DEALER
-----------	------	-------------------

PRE-GALVANIZED MAST TUBING

-----

1 1/4" Tubing - Expanded End  
Pre-Galvanized  
(05PLX)

161005PLX  
181005PLX  
201005PLX  
160505PLX  
180505PLX  
200505PLX

*DISCONTINUED*

-----

1 1/2" Tubing - Expanded End  
Pre-Galvanized  
(06PLX)

161006PLX                      6.15      3.70

1 1/4" Tubing - Swaged End  
Pre-Galvanized  
(05PHS)

161005PHS                      5.00      3.00

181005PHS                      4.40      2.63

ORDER NO.	LIST	SUGG'D. DEALER
-----------	------	-------------------

201005PHS                      3.60      2.15

160505PHS                      2.65      1.60

180505PHS                      2.45      1.46

200505PHS                      2.00      1.21

1 1/4" Tubing - Plain End  
Pre-Galvanized  
(05PH)

161005PH                      4.65      2.80

181005PH                      4.05      2.43

1 1/2" Tubing - Plain End  
Pre-Galvanized  
(06PH)

161006PH                      5.50      3.31

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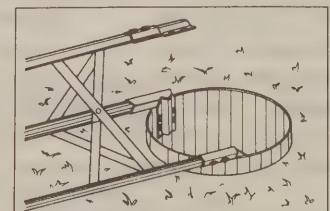
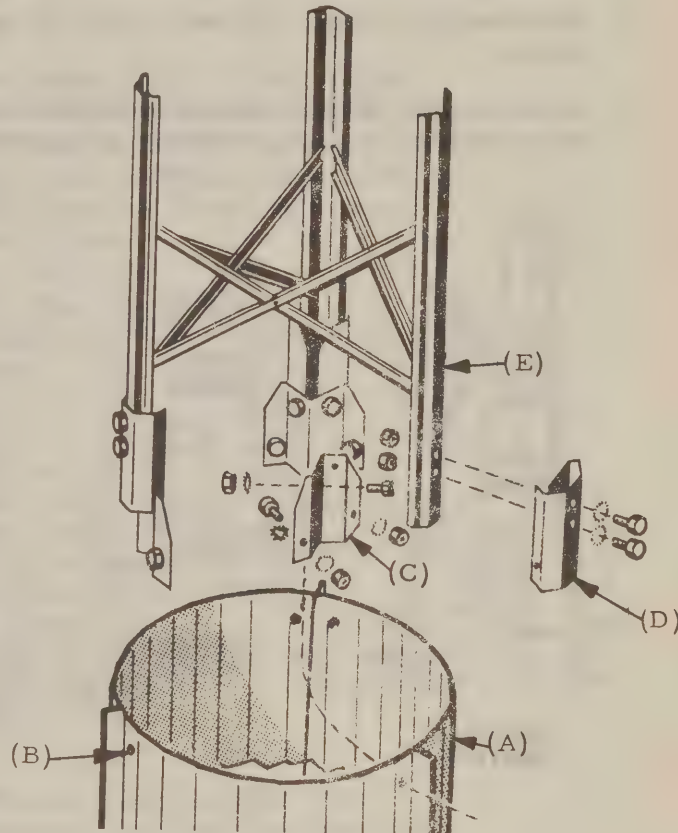


March 1, 1971

Tools for digging hole - spade, shovel, (telegraph spoon and shovel helpful but not necessary).

Tools for tower assembly - 1/2" drive socket ratchet, 1/2" box open end, 3/4" box open end, 3/4" socket, 7/16" box open end, 7/16" socket 9/16" box open end, 9/16" socket, 2" x 4" x 6' board for tamping and hammer.

1. Assemble base by placing the three (3) curved pieces so they form cylinder (A) and bolt together (1/4" bolts). 1/2" (B) holes to be placed at top of cylinder.
2. To attach the W plate (C) (3 furnished), place 1/2" bolt through the holes provided in the cylinder, then place large "star" washer on the bolt, now put the W plate (C) on the bolt and then the nut, tighten snugly. Special NOTE: The large washer should be between the W plate and cylinder when installation is completed.
3. Attach leg collars (D) (3 furnished) to W plates by inserting 1/2" bolts through W plate and leg collar -- two bolts per leg collar. Make certain the W slot in leg collar is in up position (see photo).
4. Place cylinder in the position the tower is to occupy. Mark off a circle approximately 2 to 3 inches larger than the cylinder.
5. Dig hole approximately four feet deep with the diameter of the previous mark.
6. Drop cylinder (A) into the hole, and attach bottom section of tower (E) to base by placing inside leg collar (D) and bolting with the two 1/2" bolts through the leg collar and leg. This is necessary to avoid distortion of the cylinder when tamping dirt inside and outside.
7. With cylinder as vertical as possible by sight, fill and tamp dirt inside and outside of base. Tamping should be done after every 6 or 8 inches of fill.
8. Plumb tower section by placing level on outside of each leg, adjustment is made by loosening 1/2" W plate cylinder attaching bolts and adjusting W plate (C) until tower is plumb.
9. Remove the two 1/2" bolts (in bottom of W plate (C) ) on the side opposite the pivoting direction and the two 1/2" bolts on top back side of each remaining attached W plate, (see photo). The tower section is then free to be lowered to the ground.
10. NOTE: When raising the tower be careful not to bind the two leg collars (that are acting as a hinge) on the W plates, if this is done, they will be distorted and will probably need replacing. This can be avoided by having a man at this point who can slip a screw driver between the leg collar and W plate to allow them to pass and not bind.

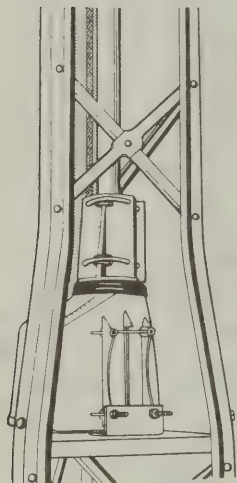


IMPORTANT

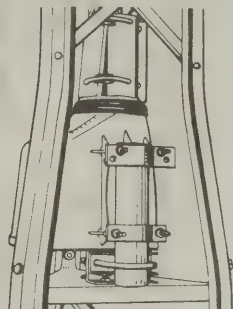
NOTE: The following procedure should be used when bolting tower sections together. Insert bolt through holes of the two sections. Place a lockwasher on the bolt and run the nut on. Only one lockwasher is required on each bolt and it is placed under the nut. Tighten the nut securely, but be careful not to strip the threads.

## INSTALLING MAST

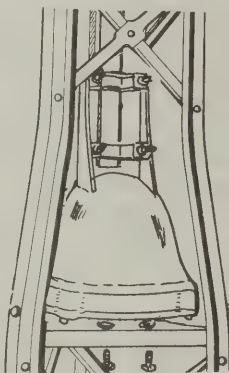
1. Two U-bolt assemblies with "L" brackets are supplied for installing the mast. These "L" brackets are bolted through the slotted holes on each plate with the short leg of the "L" bracket toward the outside of the tower.
2. Place the mast between the "U" bolt and "V" clamp, then tighten down with "U" bolt. This secures the mast.
3. Adjustments to make the mast vertical may be made by moving the "L" brackets in the slotted holes.
4. A horizontal step is included in the top section to make it more comfortable for installer when working on mast, rotator, or antennas.



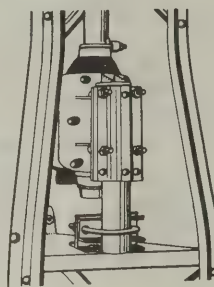
**CROWN  
ROTOR**



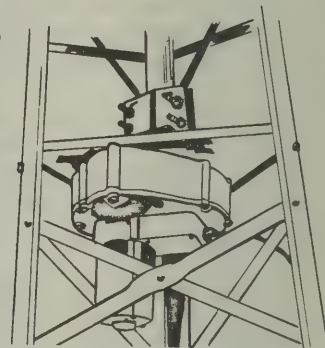
**CROWN  
ROTOR**



**CDR "BELL"  
ROTOR**



**ALLIANCE  
ROTOR**



**HY-GAIN 400  
ROTOR**

## INSTALLING ROTATORS

1. Any make of rotator can be installed inside the top tower section for a neat appearance and, also, to make use of the mast bearing on the tower top plate. A short piece of tubing is furnished with each tower and can be used as a thrust bearing (for 1-1/4" mast) with the normal mast clamp on the top plate. The CDR "B" rotator can be installed by removing the base part and using four 1/4" x 1" bolts running up through the four holes in the rotor plate and into rotator. It is desirable to place 3/8" nuts to act as spacers between the rotor plate and the rotor. This will prevent the terminals of the rotor and rotor wire from shorting on the rotor plate.
2. An 8" piece of tubing is furnished with each tower. It can be installed into the clamp ("V" clamp and "L" shaped brackets furnished for offset rotor installation only) for the Alliance rotor and other offset rotors. It is necessary to reverse the clamp assembly (to face the outside of the tower), opposite that of installing a standard mast to the rotor plate. Crown rotators can be mounted directly to the "L" shaped bracket as shown or to the 8" mast as described above. A short piece of tubing is furnished with each tower and can be used as a thrust bearing (for 1-1/4" mast) with the normal mast clamp on the top plate.
3. The new Hy-Gain Model 400 rotator is mounted beneath the rotor plate (as pictured above). It will be necessary to increase the 1/4" holes in the rotor plate to 3/8" holes to use the 3/8" bolts furnished with this rotator. A short piece of tubing is furnished with each tower and can be used as a thrust bearing (for 1-1/4" mast) with the normal mast clamp on the top plate.

# **ROHN-SPAULDING, INC.**

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Area Code 317 • Telephone 654-4494

Peoria, Ill., Birmingham, Ala., Frankfort, Ind.

28-b-70



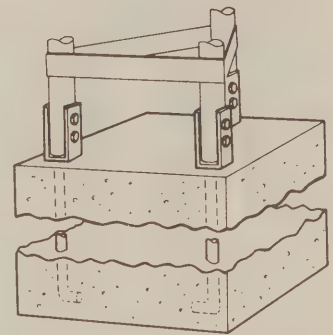
March 1, 1971

INSTRUCTIONS FOR ROHN-SPAULDING'S XHC  
HINGED BASE FOR CONCRETE

Dig a hole 3 ft. square at the top, 4 ft. square at the bottom and 4 ft. deep.

Bolt the 1-1/2" water pipe adapters to the tower legs at the bottom section in such a way that the tower is permitted to hinge. (NOTE: two of these pipe adapters are drilled 15 degrees off of center on opposing sides, thus forming a hinge action when properly installed. The third adapter is drilled with holes 180 degrees from each other and this adapter forms the lock side of the hinge.) Next place a nut and then a lock washer on each of the bolt hooks. After this is done, place the U adapter bracket next to the above lock washer, following this with the flat washer and the second nut.

Then bolt the adapter bracket assembly to the 1-1/2" adapters on the tower. After being certain that the tower will hinge from two legs, (see sketch) start to fill the hole with cement. As the cement is nearing the top of the hole, imbed the bolt hooks (attached to the tower section) into the cement. They should be deep enough to allow the threaded area only to extend above the top of the cement pier when it is completed. Finish filling the hole.



(XHC) HINGED  
CONCRETE BASE

Note: If the bolts tend to sink into the cement deeper than the threaded area, it will be necessary for you to "crib up" the section by placing 2" x 4" boards under the cross braces of the tower section (extending to the outside of the pier) and blocking up under them to relieve the weight of the section until the cement has set. Be sure the cement is solid around the bolt.

When the cement is thoroughly dry and the bolts are firm, the lower section is leveled by adjusting the nuts on the bolt hooks.

When the tower is level, these nuts must be extremely tight.

To hinge the tower, remove the bolt from the lock side of the tower hinge, and hinge the section over in order that the rest of the tower assembly may be completed.

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83-e-71





ROHN-SPAULDING  
ASSEMBLY AND INSTALLATION INSTRUCTIONS  
FOR AX MODEL TOWERS  
(Using 4' Concrete Base Stubs)

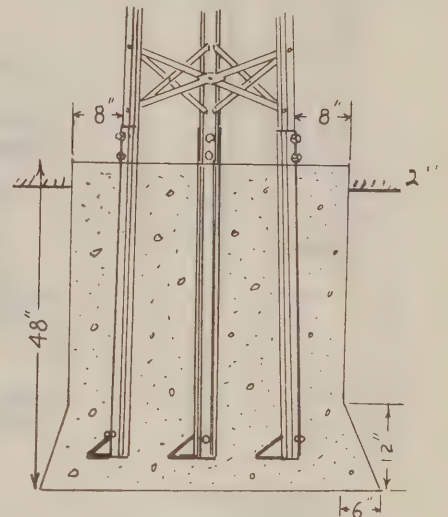
Oct. 1, 1970

BREAKING DOWN BUNDLE

1. Remove the 8 ft. mast, the three 4 ft. base stubs, and the package of nuts, bolts, washers and stand-offs.
2. Lay the bundle on its side and remove tower sections. Start with AX-1A section (smallest section) and remove by pulling out with quick firm jerks. It is not necessary nor desirable to pry tower sections out with tools.
3. Inspect all tower sections on delivery to make sure there are no loose or broken rivets caused by transport mishandling. If a rivet is broken or loose, it should be replaced by a snug-fitting machine bolt and nut, securely tightened.

SETTING BASE IN CONCRETE

1. We recommend that a square hole be dug 4 ft. deep and 8 inches wider at the top on each side than the width of the base section of the tower. This hole should have vertical sides until the last foot and then be "belled" out on all sides about 6 inches, as in the illustration at the right.
2. Fasten the 4 ft. base stubs to the tower base section.
3. Place the bottom tower section with base stubs attached into the hole and hold in a vertical position while concrete is poured. Level the concrete at least 2" above the ground. (It may be necessary to make a form for this.) This will allow drainage. You may plumb the tower with either a plumb-bob or plumb level. Plumbing with plumb level is done on the outside of the legs.
4. Here is a table of approximate base widths at ground level and volume of bases for installers who use "Ready Mixed" concrete.



	AX-24	AX-32	AX-40	AX-48	AX-56	AX-64
Width in In.	33"	36"	38"	41"	43"	46"
Cubic Yds.	1.18	1.35	1.54	1.80	2.10	2.30

5. NOTE: If the tower is being placed in loose soil, be sure to check with a local building contractor for advice on installing a deeper or larger base. This tower is no stronger than the base.

ERECTING TOWER

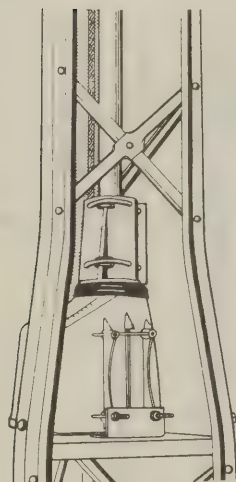
1. After the concrete is suitably hard, the tower is ready to be erected.
2. The tower may be installed by climbing and assembling sections vertically. Each higher section slides inside previous one and is located on the rivet stop. (This is used to prevent the tower section from slipping too far down.) Proceed by bolting together.

IMPORTANT NOTE: The following procedure should be used when bolting tower sections together. Insert bolt through holes of the two sections. Place a lockwasher on the bolt and run the nut on. Only one lockwasher is required on each bolt and it is placed under the nut. Tighten the nut securely, but be careful not to strip the threads.

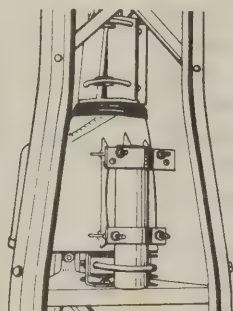
NOTE: 1/4" dia. x 1/2" bolts are used on AX-1 and AX-2, and the top of AX-3 sections. 1/2" dia. x 3/4" bolts are used on the bottom of the AX-3, and on all sections AX-4 to AX-8 (AX-8 is the largest section). All bolts and nuts are specially heat treated.

## INSTALLING MAST

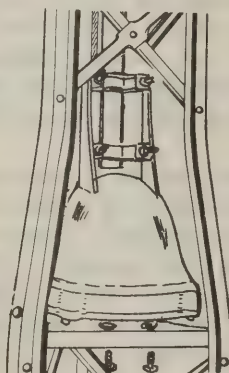
1. Two U-bolt assemblies with "L" brackets are supplied for installing the mast. These "L" brackets are bolted through the slotted holes on each plate with the short leg of the "L" bracket toward the outside of the tower.
2. Place the mast between the "U" bolt and "V" clamp, then tighten down with "U" bolt. This secures the mast.
3. Adjustments to make the mast vertical may be made by moving the "L" brackets in the slotted holes.
4. A horizontal step is included in the top section to make it more comfortable for installer when working on mast, rotator, or antennas.



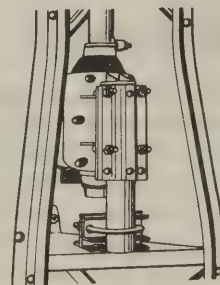
**CROWN  
ROTOR**



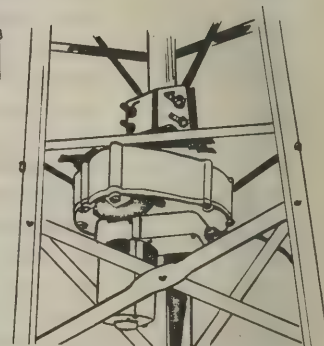
**CROWN  
ROTOR**



**CDR "BELL"  
ROTOR**



**ALLIANCE  
ROTOR**



**HY-GAIN 400  
ROTOR**

## INSTALLING ROTATORS

1. Any make of rotator can be installed inside the top tower section for a neat appearance and, also, to make use of the mast bearing on the tower top plate. A short piece of tubing is furnished with each tower and can be used as a thrust bearing (for 1-1/4" mast) with the normal mast clamp on the top plate. The CDR "B" rotator can be installed by removing the base part and using four 1/4" x 1" bolts running up through the four holes in the rotor plate and into rotator. It is desirable to place 3/8" nuts to act as spacers between the rotor plate and the rotor. This will prevent the terminals of the rotor and rotor wire from shorting on the rotor plate.
2. An 8" piece of tubing is furnished with each tower. It can be installed into the clamp ("V" clamp and "L" shaped brackets furnished for offset rotor installation only) for the Alliance rotor and other offset rotors. It is necessary to reverse the clamp assembly (to face the outside of the tower), opposite that of installing a standard mast to the rotor plate. Crown rotators can be mounted directly to the "L" shaped bracket as shown or to the 8" mast as described above. A short piece of tubing is furnished with each tower and can be used as a thrust bearing (for 1-1/4" mast) with the normal mast clamp on the top plate.
3. The new Hy-Gain Model 400 rotator is mounted beneath the rotor plate (as pictured above). It will be necessary to increase the 1/4" holes in the rotor plate to 3/8" holes to use the 3/8" bolts furnished with this rotator. A short piece of tubing is furnished with each tower and can be used as a thrust bearing (for 1-1/4" mast) with the normal mast clamp on the top plate.

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ROHN-SPAULDING'S HAM TOWER  
ASSEMBLY AND INSTALLATION INSTRUCTIONS  
FOR HAX-HDX MODEL TOWERS  
(Using 4' Concrete Base Stubs)

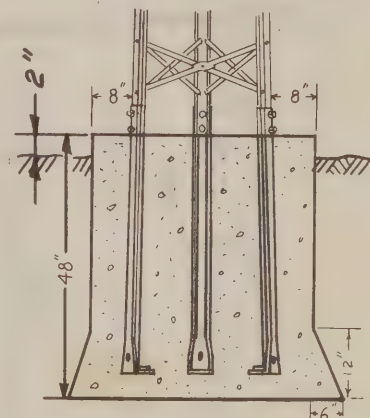
BREAKING DOWN BUNDLE

1. Remove package of hardware and the three 4' base stubs.
2. Lay bundle on side and remove tower sections. Start with inside section (smallest section) and remove by pulling out with quick firm jerks. It is not necessary, nor desirable, to pry tower sections out with tools.
3. Inspect all tower sections on delivery to make sure that there are no loose or broken rivets caused by transport mis-handling. If a rivet is broken or loose, it should be replaced by a snug-fitting machine bolt and nut, securely tightened.

SETTING BASE IN CONCRETE

1. We recommend that a square hole be dug 4 ft. deep and 8 inches wider at the top on each side than the width of the base section of the tower. This hole should have vertical sides until the last foot and then be "belled" out on all sides about 6 inches, as in the illustration at the right.
2. Fasten the 4 ft. base stubs to the tower base section.
3. Place the bottom tower section with base stubs attached into the hole and hold in a vertical position while concrete is poured. Level the concrete at least 2" above the ground. (It may be necessary to make a form for this.) This will allow drainage. You may plumb the tower with either a plumb-bob or plumb level. Plumbing with plumb level is done on the outside of the legs.
4. Here is a table of approximate base widths at ground level and volume of bases for installers who use "Ready Mixed" concrete.

HAX-32	HAX-40 HDX-32	HAX-48 HDX-40	HAX-56
Width in In. 38"	41"	43"	46"
Cubic Yds. 1.54	1.80	2.10	2.30



5. NOTE: If the tower is being placed in loose soil, be sure to check with a local building contractor for advice on installing a deeper or larger base. This tower is no stronger than the base.

ERECTING TOWER

1. After the concrete is suitably hard, the tower is ready to be erected.
  2. The tower may be installed by climbing and assembling sections vertically. Each higher section slides inside previous one and is located on the rivet stop. (This is used to prevent the tower section from slipping too far down.) Proceed by bolting together.
- NOTE: Larger bolts are used in the lower sections of the tower and the smaller bolts are used in the top sections.

IMPORTANT NOTE: The following procedure should be used when bolting tower sections together. Insert bolt through holes of the two sections. Place a lockwasher on the bolt and run the nut on. Only one lockwasher is required on each bolt and it is placed under the nut. Tighten the nut securely, but be careful not to strip the threads.

INSTALLING MAST

1. Since most "Ham" towers are to be used with rotators, there is only one FL mast clamp provided. This is a pipe flange on the top plate of the tower and is provided with three bolts to be used as set screws to hold the mast. If a rotator is used, a 4" piece of tubing with the I.D. larger than the O.D. of the mast can be installed in this clamp and used as a sleeve bearing for the mast to turn in.
2. If the mast is to be permanently affixed, it is then necessary to obtain and install an additional pipe flange assembly on the second plate.

INSTALLING ROTATORS

1. Inline model rotators such as the C.D.R. TR2, TR4, and AR22 mount directly to the rotator plate. Mounting this type of rotator to the plate is done by leaving off the bottom housing of the rotator. The necessary holes for mounting are pre-drilled in the plate itself. It is desirable to place 3/8" nuts to act as spacers between the rotor plate and the rotator. This will prevent the terminals of the rotator and the rotator wire from making an electrical short on the rotor plate.
2. An 8" piece of tubing is furnished with each tower. It can be installed into the clamp ("V" clamp and "L" shaped brackets furnished for offset rotor installation only) for the Alliance rotor and other offset rotors. It is necessary to reverse the clamp assembly (to face the outside of the tower), opposite that of installing a standard mast to the rotor plate. Crown rotators can be mounted directly to the "L" shaped bracket as shown on the reverse side, or to the 8" mast as described above.
3. The new Hy-Gain Model 400 rotator is mounted beneath the rotor plate (as pictured on the reverse side). It will be necessary to increase the 1/4" holes in the rotor plate to 3/8" holes to use the 3/8" bolts furnished with this rotator.

U.S. Patent No. 2,806,560

**ROHN-SPAULDING, INC.**

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Peoria, Ill., Birmingham, Ala., Frankfort, Ind.

28-c-70

# ROHN-SPAULDING

## HAX-HDX HAM SERIES TOWERS

HDX

HAX

TOP PLATE ASSEMBLY WITH  
HEAVY DUTY MAST CLAMP (FL)

### OPTIONAL BASES:

SCREW ANCHOR BASE  
(XSAB-36) WHEN SEC.  
3,4,5 OR 6 IS USED FOR  
BASE SECTION

SCREW ANCHOR BASE  
(XSAB-78) WHEN SEC.  
7 OR 8 IS USED FOR  
BASE SECTION

HINGED CONCRETE BASE  
(XHC) FOR ALL  
SECTIONS

ALLIANCE  
ROTOR

CDR "BELL"  
ROTOR

CROWN  
ROTOR

CROWN  
ROTOR

HY-GAIN 400  
ROTOR

HAX AND HDX  
SELF-SUPPORTING TOWERS  
(SELF-SUPPORTING WITH ONE BEAM ONLY.)

28-d-70



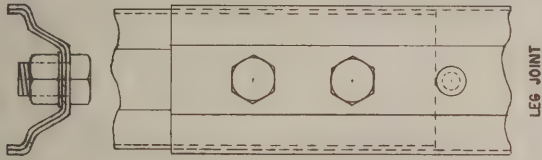
SPAULDING

SPECIFICATIONS FOR 8' AX SECTIONS

CAT. NO.	DESCRIPTION	BOLTS	DIMENSIONS (Inside to Inside)		MATERIAL SIZES		WT. (lbs.)
			Top	Bottom	Leg	Braces	
AX-1 AX-1A	#1 standard offset sect. #1 offset top sect. w/horiz- ontal steps, top plate (XT-1), rotor plate (XR-1) & mast hardware kit (AX-MK2)	6 - 1/4"x1/2" 6 - 1/4"x1/2"	8" 8"	10 3/16" 10 3/16"	2 3/4"x18 ga. 2 3/4"x18 ga.	18 ga. 18 ga.	18.0 20.0
AXS-1	#1 straight section	6 - 1/4"x1/2"	10 3/16"	10 3/16"	2 3/4"x18 ga.	18 ga.	18.5
AX-2 AX-2A	#2 standard offset sect. #2 offset top sect. w/top plate (XT-2) and rotor plate (XR-2)	6 - 1/4"x1/2" 6 - 1/4"x1/2"	10 3/16" 10 3/16"	12 3/4" 12 3/4"	2 7/8"x18 ga. 2 7/8"x18 ga.	18 ga. 18 ga.	19.0 22.0
AXS-2	#2 straight section	6 - 1/4"x1/2"	12 3/4"	12 3/4"	2 7/8"x18 ga.	18 ga.	19.5
AX-3 AX-3A	#3 standard offset sect. #3 offset top sect. w/top plate (XT-3) and rotor plate (XR-3)	6 - 1/2"x3/4" 6 - 1/2"x3/4"	12 3/4" 12 3/4"	15" 15"	3" x 16 ga. 3" x 16 ga.	18 ga. 18 ga.	24.0 28.0
AXS-3	#3 straight section	6 - 1/2"x3/4"	15"	15"	3" x 14 ga.	18 ga.	27.0
AX-4 AXS-4	#4 standard offset sect. #4 straight section	6 - 1/2"x3/4" 6 - 1/2"x3/4"	15" 17 1/4"	17 1/4" 17 1/4"	3 3/16"x14 ga. 3 3/16"x14 ga.	16 ga. 16 ga.	28.0 29.0
AX-5 AXS-5	#5 standard offset sect. #5 straight section	6 - 1/2"x3/4" 6 - 1/2"x3/4"	17 1/4" 19 3/4"	19 3/4" 19 3/4"	3 3/8"x14 ga. 3 3/8"x14 ga.	14 ga. 14 ga.	38.0 40.0
AX-6 AXS-6	#6 standard offset sect. #6 straight section	6 - 1/2"x3/4" 6 - 1/2"x3/4"	19 3/4" 22 3/8"	22 3/8" 22 3/8"	3 9/16"x14 ga. 3 9/16"x14 ga.	14 ga. 14 ga.	42.0 44.0
AX-7 AXS-7	#7 standard offset sect. #7 straight section	9 - 1/2"x3/4" 9 - 1/2"x3/4"	22 3/8" 25"	25" 25"	4 1/4"x12 ga. 4 1/4"x12 ga.	14 ga. 14 ga.	59.0 62.0
AX-8 AXS-8	#8 standard offset sect. #8 straight section	9 - 1/2"x3/4" 9 - 1/2"x3/4"	25" 28"	28" 28"	4 1/2"x12 ga. 4 1/2"x12 ga.	14 ga. 14 ga.	65.0 68.0







LEG JOINT

DETAIL "A"

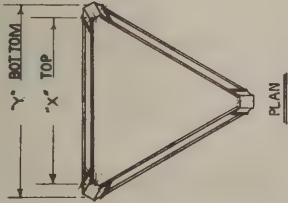
DETAIL "B"

NOTES: -  
BOLTS, 1035 D.H.T., H.H. ZINC PLATED  
WASHERS, EXTERNAL LOCK  
RIVETS, 2017 ALUMINUM  
MATERIAL, GALV. STEEL

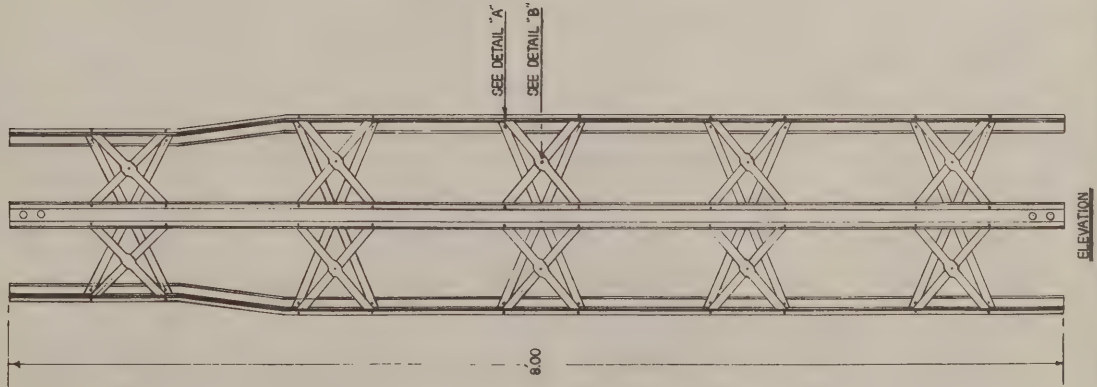
SECTION NO.	MATERIAL GA.	LEG JOINT BOLTS	DIA. OF RIVET	TOP "X"	BOTTOM "Y"
AX-2	BRACES 18 GA. LESS 18 GA.	TOP 2, 1/4" X 1/2" BOTTOM 2, 1/4" X 1/2"	5/32"	10-2 5/8"	12-2 3/4"
AX-3	BRACES 18 GA. LESS 18 GA.	TOP 2, 1/4" X 1/2" BOTTOM 2, 1/2" X 3/4"	5/32"	12-2 3/4"	15"
AX-4	BRACES 16 GA. LESS 14 GA.	TOP 2, 1/2" X 3/4" BOTTOM 2, 1/2" X 3/4"	3/16"	15"	17-1/4"
AX-5	BRACES 14 GA. LESS 14 GA.	TOP 2, 1/2" X 3/4" BOTTOM 2, 1/2" X 3/4"	3/16"	17-1/4"	19-3/4"
AX-6	BRACES 14 GA. LESS 14 GA.	TOP 2, 1/2" X 3/4" BOTTOM 2, 1/2" X 3/4"	3/16"	19-3/4"	22-2 3/8"

NOTE: FOR STRAIGHT SECTIONS, ELIMINATE "X" DIMENSION

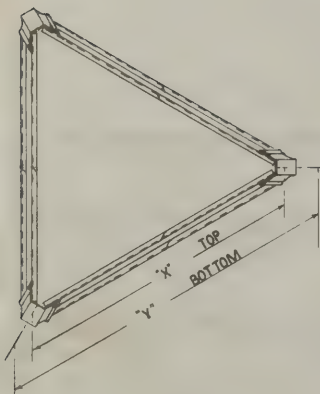
SPAULDING PRODUCTS COMPANY	
FRANKFORD	INDIANA
A X - SERIES TOWER	
SECTIONS 2-3-4-5-6	
DRAWN BY	CHECKED BY
J.V.M.	B.W.L.
DATE	SCALE
12-22-60	2" = 12"
	FULL SIZE
DRAWING NO.	SP-68106
	12-2-68



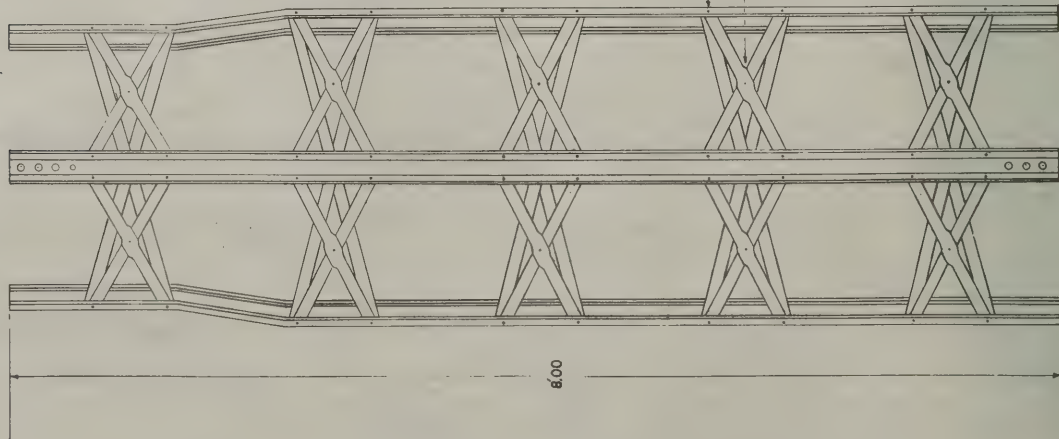
PLAN



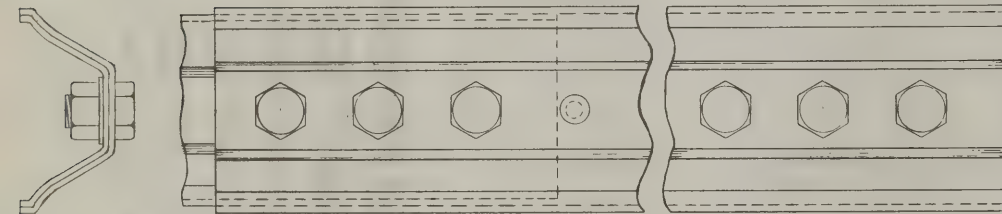
ELEVATION



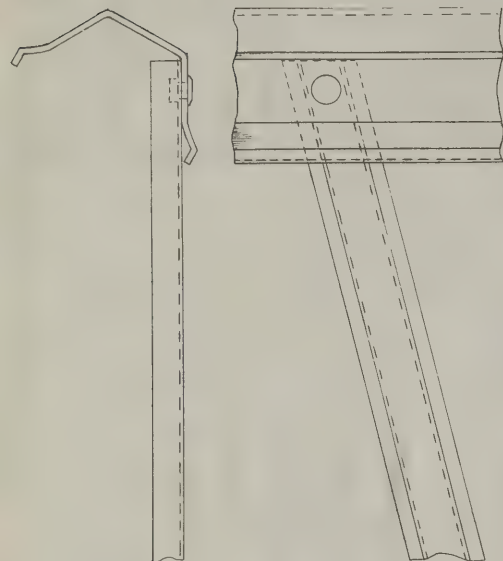
PLAN



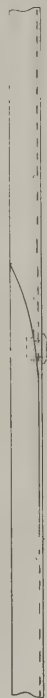
ELEVATION



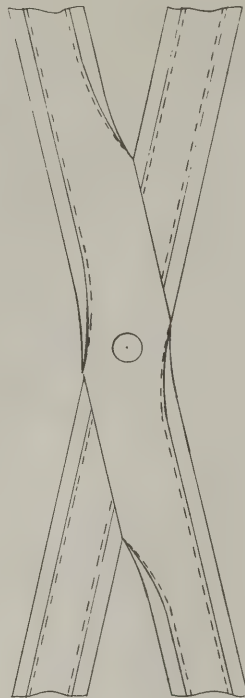
TOWER LEG, JOINT SECTIONS 7 & 8



DETAIL "A"



DETAIL "B"



NOTES:  
BOLTS, 10.3.5 D.H.T.H. ZINC PLATED  
WASHERS, EXTERNAL LOCK  
RIVETS, 2117 ALUMINUM  
MATERIAL, GALV. STEEL

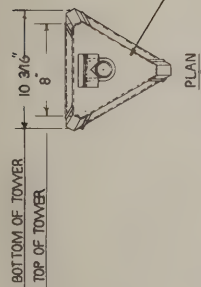
SECTION NO.	MATERIAL GA.	LEG JOINT BOLTS	DIA. OF RIVET	TOP "X"	BOTTOM "Y"
AX-7	GAUGES 14 GA. TOP 12 GA. BOTTOM	2, 1/2 X 3/4 3, 1/2 X 3/4	1/4"	19-3/4"	25"
AX-8	GAUGES 14 GA. TOP 12 GA. BOTTOM	2, 1/2 X 3/4 3, 1/2 X 3/4	1/4"	25"	28"

NOTE: FOR STRAIGHT SECTIONS ELIMINATE "X" DIMENSION

SPAULDING PRODUCTS COMPANY		DRAWING NO.	
FRANKFORT		SP. 681104	
INDIANA		DATE	
A X - SERIES TOWER		SCALE	
SECTIONS 7 & 8		12-2-68	
		12-29-60	
		FULL SIZE	



NOTE: FOR STRAIGHT SECTIONS  
ELIMINATE 8" DIMENSION



TOP ASSEMBLY

PLAN

BOTTOM OF TOWER  
TOP OF TOWER

10 GA. GALV. STEEL

SLEEVE ~~IS~~ TO BE USED WHEN ROTOR IS INSTALLED  
INSIDE OF TOWER

MAST

SEE NOTES (REV. I)

SEE DETAIL "A"

SEE DETAIL "B"

SEE JOINT

ELEVATION

8.00

DETAIL "A"

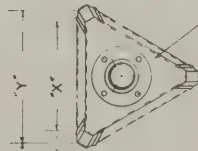
DETAIL "B"

JOINT NO. 1 & NO. 2 LEG SECTION

TOWER SECTION NO. AX-1A  
NOTES: BOLTS 1/4" X 1/2" 1035 D.H.T. H.R. CADMIUM PLATED.  
EXTERNAL LOCK WASHERS.  
RIVETS 3/32" 2117 ALUMINUM  
MATERIAL 10 GA. GALV. STEEL EXCEPT AS NOTED  
REV. 8-5-44 STEPS ADDED

SPAULDING PRODUCTS COMPANY	
FRANKFORT	INDIANA
TOWER SECTION A X-1A	
DRAWN BY	CHECKED BY
W.M.	B.W.L.
SECTION NO.	12-2-68
AX-1A	
DATE	SCALE
12-16-60	FULL SIZE
	2" = 12"

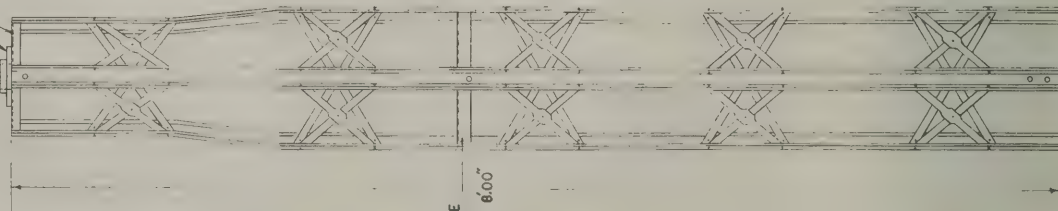
BOTTOM OF TOWER INSIDE  
TOP OF TOWER INSIDE



PLAN

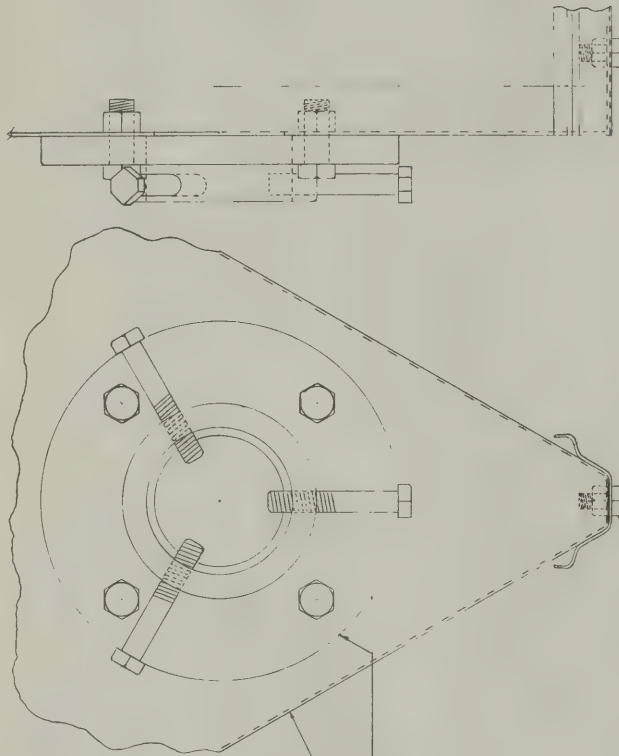
TOP BEARING ASSEMBLY

\* FL HEAVY DUTY  
MAST CLAMP

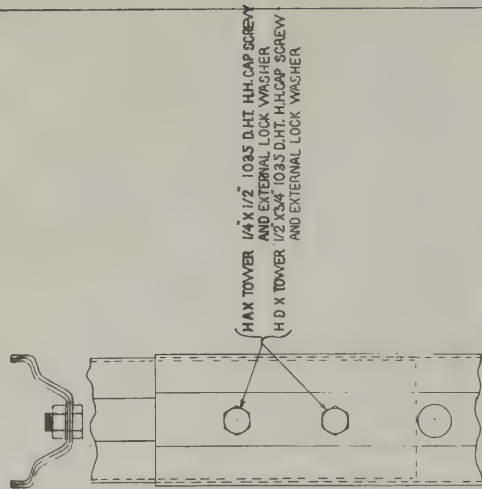


ROTOR PLATE

8.00'

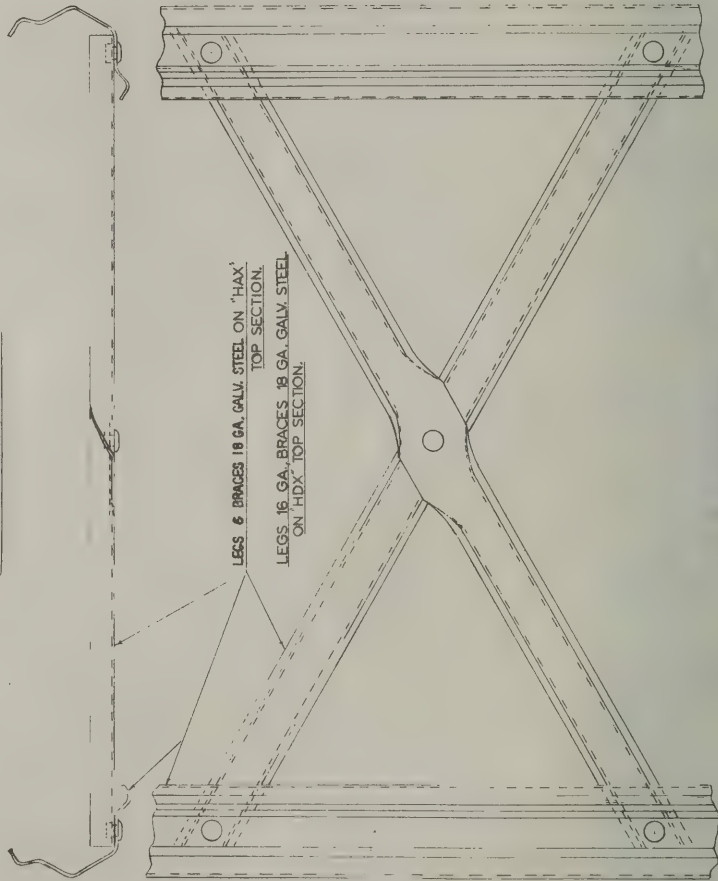


TOWER TOP SECTION LEG JOINT



HAX TOWER 1/4" X 1/2" 1035 D.H.T. HH CAP SCREW  
AND EXTERNAL LOCK WASHER  
H9 X TOWER 1/2" X 3/4" 1035 D.H.T. HH CAP SCREW  
AND EXTERNAL LOCK WASHER

1/4" X 1/2" 1035 D.H.T. HH CAP SCREW



LEGS & BRACES 18 GA. GALV. STEEL ON "HAX" TOP SECTION.  
LEGS 16 GA. BRACES 18 GA. GALV. STEEL ON HDX TOP SECTION.

SECTION NO	TOWER TYPE	Y'	X'
AX-2A	HA X	12 3/4"	10 3/16"
AX-3A	HD X	15"	12 3/4"

SPALDING PRODUCTS COMPANY  
FRANKFORT INDIANA

HAX & HDX HAM TOWER

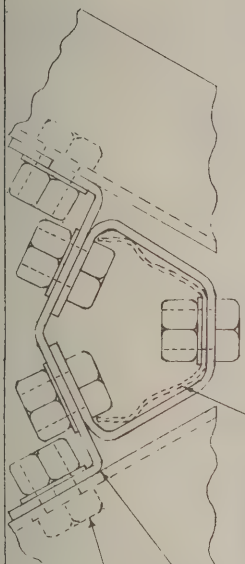
TOP SECTION

DRAWN BY	CHECKED BY	DRAWING NO.
J.W.M.	B.W.L.	SP-68103
DATE	SCALE	
12-2-60	NONE	12-2-68

DETAIL OF CROSS BRACES RIVETED TO TOWER LEGS  
S72 2117 ALUM. RIVETS

ELEVATION





SECTION Y-Y

VERTICAL MEMBER (LEG) OF TOWER

1/2" X 3/4" 10.9S H.T. CAP SCREWS  
ZINC PLATED

V-PLATE 1/2 GA. GALV. STEEL

(LEG COLLAR - ADAPTER)  
1/2 GA. GALV. STEEL

1-3/4"

48" NOMINAL

CHANNEL 1/2 GA. GALV. STEEL  
PLAN

3  
4  
5  
6

1/2" X 2-1/2" SAFETY  
BOLT ZINC PLATED

PIPE CLAMP

1-1/2" I.P. SIZE  
GROUND ANCHOR SCREWS 6 DIA.

ELEVATION

XSAB-36 BASE	HOLES NO.
X48 SAB	6
X40 SAB	5
X32 SAB	4
X24 SAB	3

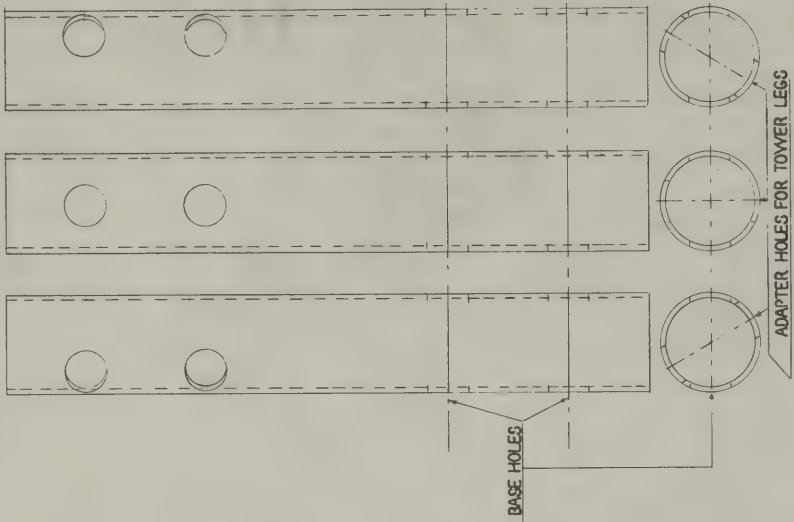
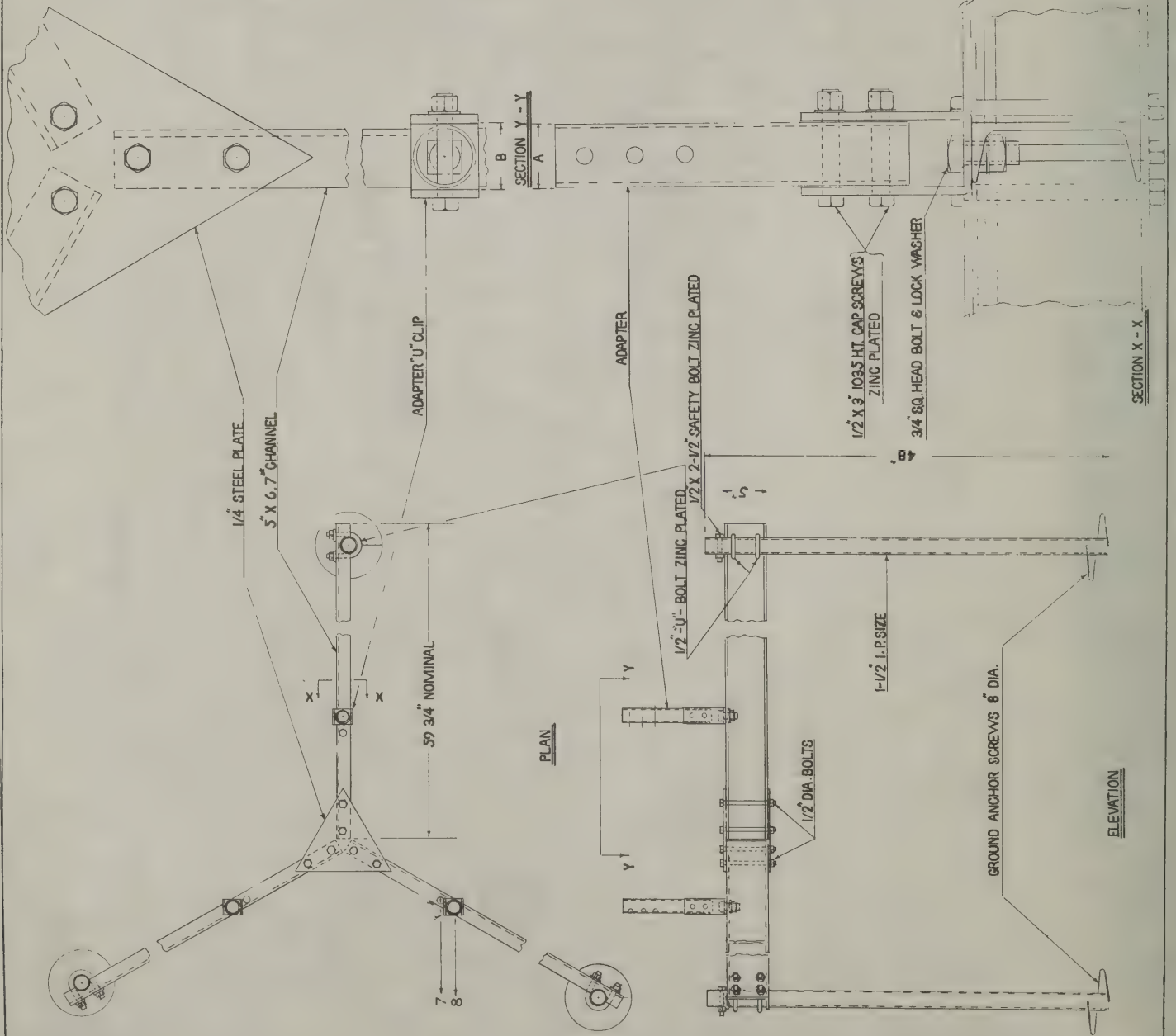
SPAULDING PRODUCTS COMPANY  
INDIANA  
FRANKFORT

XSAB-36 SCREW ANCHOR BASE

AX TOWER SERIES

DRAWN BY J.V.M.	CHECKED BY B.W.L.	DRAWING NO.
DATE 10-25-60	SCALE FULL SIZE 2" = 1'	SP-681102 12-2-68

SECTION X-X



SET OF ADAPTER STUBS

TOWER NO.	XSAB-78		
	BASE	ADAPTER	UCLIP
	HOLE NO.		
	X-56 SAB	A=1 1/4 I.P.S.	B=1 5/8
	X-64 SAB	A=1 1/2 I.P.S.	B=1 7/8
			7
			8

SPAULDING PRODUCTS COMPANY FRANKFORT INDIANA			
XSAB-78 SCREW ANCHOR BASE			
AX TOWER SERIES			
DRAWN BY J. L. H. S.	CHECKED BY B. W. L.	DRAWING NO.	
DATE 11-15-60	SCALE 1-1/2" = 12" 6" = 12"	SP-681100 11-23-68	



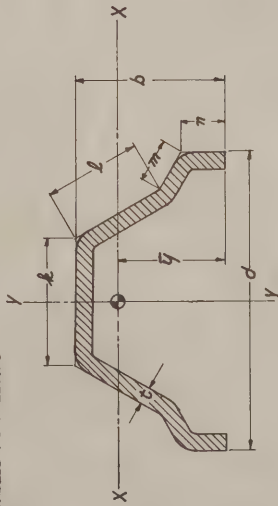
INTRODUCTION

THE SPAULDING AX-TYPE ANTENNA TOWERS ARE OPEN, LATTICED TOWERS OF TRIANGULAR CROSS-SECTION. THE TOWERS ARE MANUFACTURED IN SECTIONS APPROXIMATELY EIGHT FEET LONG WHICH ARE BOLTED TOGETHER WITH LAP SPIDERS TO FORM TOWERS UP TO 61'-8" (MINIMAL 64 FEET). THE SECTIONS ARE NUMBERED CONSECUTIVELY FROM AX-1 AT THE TOP TO AX-8 AT THE BOTTOM OF A 64-FOOT TOWER. THIS FOR EXAMPLE, A 32-FT. TOWER WILL CONSIST OF SECTIONS AX-1 THROUGH AX-4. THE LATERAL DIMENSIONS OF SUCCESSIVE SECTIONS INCREASE, THUS PROVIDING GREATER DEPTH WHERE INCREASING BENDING MOMENTS MUST BE RESISTED. ELEMENTS ARE COLD FORMED FROM HIGH STRENGTH STEEL GALVANIZED ACCORDING TO ASTM A-525 SPECIFICATIONS, THE STEEL HAVING AN AVERAGE YIELD STRENGTH OF 48,000 PSI. IT SHOULD BE POINTED OUT, HOWEVER, THAT ENSURING CALCULATIONS ARE BASED UPON STEEL HAVING A YIELD STRENGTH OF 36,000 PSI AND, IN THIS MANNER, A GREATER FACTOR OF SAFETY CAN BE REALIZED.

THE TOWERS ARE INTENDED TO SUPPORT TELEVISION RECEIVING ANTENNAS, SUCH AS FOR HOME USE. IN NORMAL APPLICATIONS THE TOWERS ARE FREE-STANDING. THE CRITICAL LOADING CONDITION IS THE WIND LOAD CONDITION. THE WIND LOADS ARE TAKEN TO BE PROPORTIONAL TO THE EXPOSED OR PROJECTED AREA OF ONE FACE, WHICH IS ASSUMED TO BE NORMAL TO THE DIRECTION OF THE WIND, MULTIPLIED BY AN APPROPRIATE FACTOR TO ACCOUNT FOR THE WIND LOAD ON THE TWO REMAINING OBlique FACES.

SECTION PROPERTIES

THE PERTINENT SECTION PROPERTIES OF THE VARIOUS ELEMENTS ARE LISTED IN TABLES AS FOLLOWS:

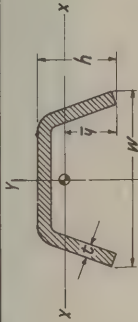


CROSS-SECTION OF TYPICAL VERTICAL ELEMENT

SECTION PROPERTIES OF VERTICAL ELEMENTS

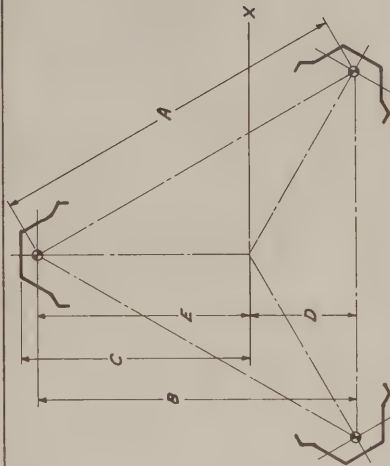
SECTION	t	b	d	l	m	n	AREA	q	I <sub>x</sub>	I <sub>y</sub>	T <sub>x</sub>	T <sub>y</sub>
AX-1	.048	.875	1.75	.75	.25	.25	.1320	.5441	.0098	.272	.272	.580
AX-2	.048	.9375	1.875	.8125	.25	.25	.1380	.5622	.0120	.295	.295	.618
AX-3	.060	.9375	1.9375	.875	.25	.25	.1800	.5796	.0148	.287	.287	.635
AX-4	.075	.9375	2.0625	.9375	.25	.25	.2391	.6022	.0226	.307	.307	.666
AX-5	.075	1.000	2.1875	1.000	.25	.25	.2531	.6366	.0270	.327	.327	.707
AX-6	.075	1.125	2.4062	1.0625	.25	.25	.2672	.6806	.0346	.360	.360	.784
AX-7	.105	1.375	2.75	1.125	.25	.25	.4462	.8096	.0332	.432	.432	.864
AX-8	.105	1.375	3.00	1.375	.25	.25	.4725	.8367	.0890	.434	.434	.951

CROSS-SECTION OF TYPICAL DIAGONAL ELEMENT



SECTION PROPERTIES OF DIAGONAL ELEMENTS

SECTION	t	h	w	AREA	q	I <sub>x</sub>	I <sub>y</sub>	T <sub>x</sub>	T <sub>y</sub>
AX-1	.048	.35	.75	.054	.235	.000620	.107	.00330	.247
AX-2	.048	.35	.75	.054	.235	.000620	.107	.00330	.247
AX-3	.048	.35	.75	.054	.235	.000620	.107	.00330	.247
AX-4	.060	.35	.75	.0675	.228	.000732	.104	.00394	.262
AX-5	.075	.46	1.05	.1125	.307	.002164	.139	.01342	.345
AX-6	.075	.46	1.05	.1125	.307	.002164	.139	.01342	.345
AX-7	.075	.46	1.05	.1125	.307	.002164	.139	.01342	.345
AX-8	.075	.46	1.05	.1125	.307	.002164	.139	.01342	.345



TYPICAL CROSS-SECTION OF TOWER

SECTION PROPERTIES OF TOWER									
SECTION	AREA (3 LEGS) IN <sup>2</sup>	A IN.	B IN.	C IN.	D IN.	E IN.	I <sub>x</sub> IN <sup>4</sup>	T <sub>x</sub> IN.	WEIGHT LBS.
AX-1	.396	9.64	8.35	5.88	2.78	5.56	6.15	3.94	16
AX-2	.414	12.14	10.51	7.36	3.50	7.01	10.21	4.97	17
AX-3	.540	14.41	12.48	8.66	4.16	8.32	10.73	5.89	22
AX-4	.717	16.61	14.39	9.96	4.80	9.59	33.05	6.79	29
AX-5	.759	19.08	16.52	11.40	5.51	11.01	46.10	7.79	40
AX-6	.892	21.65	18.75	12.92	6.25	12.50	62.73	8.85	43
AX-7	1.339	24.06	20.83	14.43	6.94	13.89	129.4	9.83	62
AX-8	1.417	27.11	23.47	16.16	7.82	15.65	133.9	11.08	68

### STRENGTH OF ELEMENTS

THE WIDTH-TO-THICKNESS RATIOS FOR THE FLAT AREAS OF THE VARIOUS ELEMENTS ARE SUCH THAT LOCAL CRIPPLING IS NOT A CONSIDERATION. MOREOVER, SINCE EACH ELEMENT IS ESSENTIALLY A CHANNEL AND ITS CROSS-SECTION IS SYMMETRICAL ABOUT ITS MINOR AXIS, THE MODE OF POSSIBLE COMPRESSIVE FAILURE OF EACH ELEMENT MAY BE TAKEN AS SYMMETRICAL. ACCORDINGLY, THE ALLOWABLE COMPRESSIVE STRESS,  $F_a$ , FOR THE VARIOUS ELEMENTS IS TAKEN FROM A.I.S.C. SPECIFICATIONS FOR STEEL HAVING A YIELD STRENGTH OF 36,000 PSI AT THE CORRESPONDING SLENDerness RATIOS OF THE ELEMENTS. IN ACCORDANCE WITH THESE SPECIFICATIONS, THE ALLOWABLE STRESSES ARE INCREASED BY 33 1/3 PERCENT FOR THE WIND LOAD CONDITION; THEREFORE  $F_a = 1.33 F_a$ . THE ALLOWABLE COMPRESSIVE STRESSES FOR THE VARIOUS MEMBERS ARE COMPUTED IN THE TABLE BELOW.

SECTION	VERTICAL LEGS					DIAGONAL BRACES				
	$L$ , IN.	$\frac{L}{t}$	$F_a$ , PSI	$L$ , IN.	$\frac{L}{t}$	$F_a$ , PSI	$L$ , IN.	$\frac{L}{t}$	$F_a$ , PSI	$F_a$ , PSI
AX-1	12	.272	44.1	10,850	11.6	5.8	.107	54.2	17,970	23,960
AX-2	12	.295	40.7	9,130	25,510	14.4	.107	67.3	16,710	22,280
AX-3	12	.287	41.8	9,050	25,400	15.2	.107	71.0	16,330	21,770
AX-4	12	.307	39.1	9,260	25,680	17.2	.104	82.7	15,050	20,070
AX-5	12	.327	36.7	9,440	25,780	19.4	.139	69.8	16,450	21,930
AX-6	12	.360	32.3	9,710	26,280	22.0	.139	78.1	15,460	20,620
AX-7	12	.432	27.8	20,090	26,790	24.0	.139	86.3	14,640	19,520
AX-8	12	.434	27.6	20,110	26,810	27.4	.139	98.6	13,150	17,530

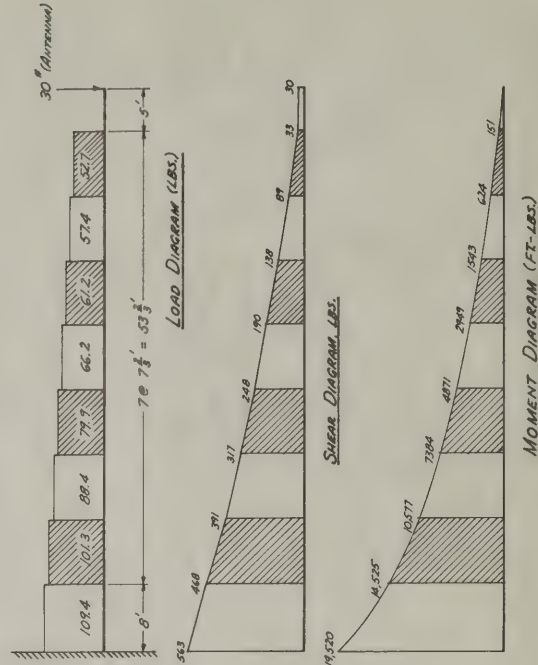
### PROJECTED AREAS AND WIND LOADS

THE WIND LOAD ON ONE FACE NORMAL TO THE DIRECTION OF THE WIND IS TAKEN AT VARIOUS WIND PRESSURES ACTING ON THE PROJECTED AREA OF THAT FACE. AT THE REMAINING TWO FACES THE NORMAL LIES AT 90° TO THE DIRECTION OF THE WIND AND, THEREFORE, THE WIND VELOCITY COMPONENT ON SUCH FACES IS ONE-HALF OF THAT ON THE FRONTAL FACE. SINCE THE WIND PRESSURE VARIES AS THE SQUARE OF THE VELOCITY, THE LOAD ON EACH OF THE TWO OBlique FACES IS ONE-FOURTH OF THAT ON THE FRONTAL FACE, AND THE TOTAL LOAD MAY BE TAKEN AS 1.5 TIMES THE LOAD ON THE FRONTAL FACE. AN ANTENNA HAVING A PROJECTED OF 2 SQUARE FEET AND ASSUMED TO BE LOCATED 5 FEET ABOVE THE TOWER IS ALSO INCLUDED IN THE SHEAR AND MOMENT DIAGRAMS SHOWN IN THE COLUMN AT THE RIGHT.

IN COMPUTING THE APPLICABLE AREA LOADS SUBSEQUENTLY IN THE SECTION ON STRESSES, AN ALLOWANCE OF 50 PERCENT HAS BEEN MADE FOR THE WEIGHT OF THE ANTENNA AND ACCESSORIES PLUS AN ALLOWANCE FOR A 3/8" DIAMETER CABLE LINE IN ADDITION TO THE TOWER ITSELF.

PROJECTED AREAS AND WIND LOADS ON THE SECTIONS AT VARIOUS WIND PRESSURES ARE SHOWN IN THE TABLE AT THE RIGHT.

SECTION	PROTECTED AREAS					WIND LOAD PER SECTION				
	VERTICAL LEGS			DIAGONAL BRACES		TOTAL	WIND PRESSURE			
	EXPOSED LENGTH, IN.	EXPOSED AREA (1 LEG) $FT^2$	EXPOSED WIDTH, IN.	EXPOSED LENGTH, IN.	EXPOSED AREA (1 FACE) $FT^2$		10 PSF (50 MPH)	15 PSF (62.1 MPH)	20 PSF (70.2 MPH)	
AX-1	1.37	.91	1.82	.75	10.0	.52	2.34	35.1	52.7	70.2
AX-2	1.46	.97	1.94	.75	11.75	.61	2.55	38.3	57.4	76.5
AX-3	1.50	1.00	2.00	.75	13.75	.72	2.72	40.8	61.2	81.6
AX-4	1.59	1.06	2.12	.75	15.75	.82	2.94	44.1	66.2	88.2
AX-5	1.68	1.12	2.24	1.05	18.0	1.31	3.55	53.3	78.9	106.5
AX-6	1.83	1.22	2.44	1.05	20.5	1.49	3.93	59.0	88.4	117.9
AX-7	2.14	1.43	2.86	1.05	22.5	1.64	4.50	67.5	101.3	135.0
AX-8	2.27	1.51	3.02	1.05	25.2	1.84	4.86	72.9	108.4	145.8

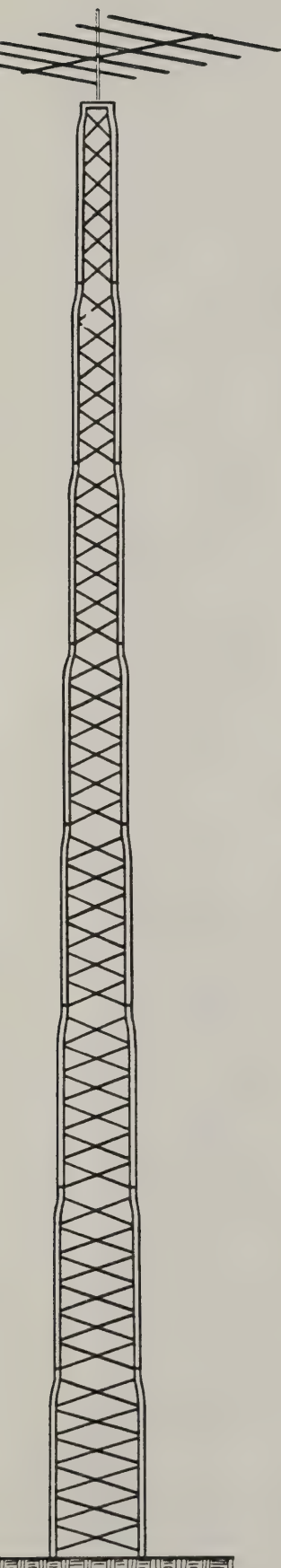


NOTE: THE SHEAR AND MOMENT DIAGRAMS INCLUDE LOADING DUE TO WIND ON TOWER, ANTENNA, AND 3/8" DIAMETER CABLE LINE. THE LOAD DIAGRAM DOES NOT INCLUDE THE CABLE LINE. DIMENSIONS ARE FOR A WIND PRESSURE OF 15 PSF.



For Home TV  
Ham Radio  
and CB

**ROHN**  
**BX Towers**



## STANDARD

### Most Basic Tower Needs

Up to 6 sq. ft. antenna capacity (see specifications)

Available to 64' in 8' sections

"X" Brace design gives greater strength — braces riveted in center as well as at ends

Greater width and weight at bottom — for greater strength

Beaded channel leg for added strength

All riveted construction — no welds

All steel — galvanized for added life

Can be used with Concrete Base Stubs, Cylinder Base or Hinged Concrete Base (see tower accessories chart)

Tower can be assembled on the ground and hinged up or built vertically, section upon section

Rotators easily installed

Physical properties and specifications available

Compact Nested 48' Tower Package — takes only 2 sq. ft. floor space

## HEAVY DUTY

### For Heavier Capacity

Has same structural features as BX

Up to 10 sq. ft. antenna capacity (see specifications)

Available to 56' in 8' sections

This tower will hold larger antennas and rotators than standard BX tower. Top of HBX tower is a 10-3/16" triangle

Rotators easily installed

Can be used with Concrete Base Stubs or Hinged Concrete Base (see tower accessories chart)

Tower can be assembled on the ground and hinged up or built vertically, section upon section

Physical properties and specifications available

Compact Nested 56' Tower Package — takes only 2-1/2 sq. ft. floor space



# BX TOWERS

## For TV, Ham, CB Installations

### EXTRA HEAVY DUTY

#### Our Heaviest BX Tower

Has same structural feature as BX

Up to 18 sq. ft. antenna capacity  
(see specifications)

Available to 48' in 8' sections

Due to design structure this tower will withstand greater loading than other models. Top of HBDX tower is a 12-3/4" triangle

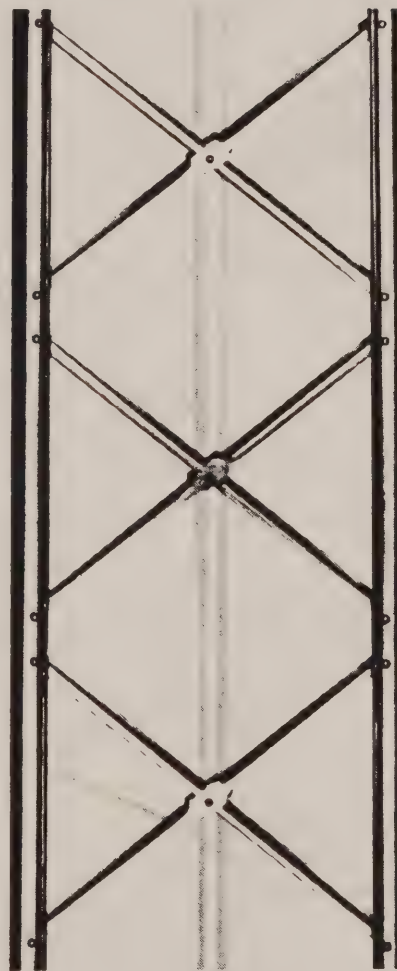
Rotators easily installed

Can be used with Concrete Base Stubs or Hinged Concrete Base (see tower accessories chart)

Tower can be assembled on the ground and hinged up or built vertically, section upon section

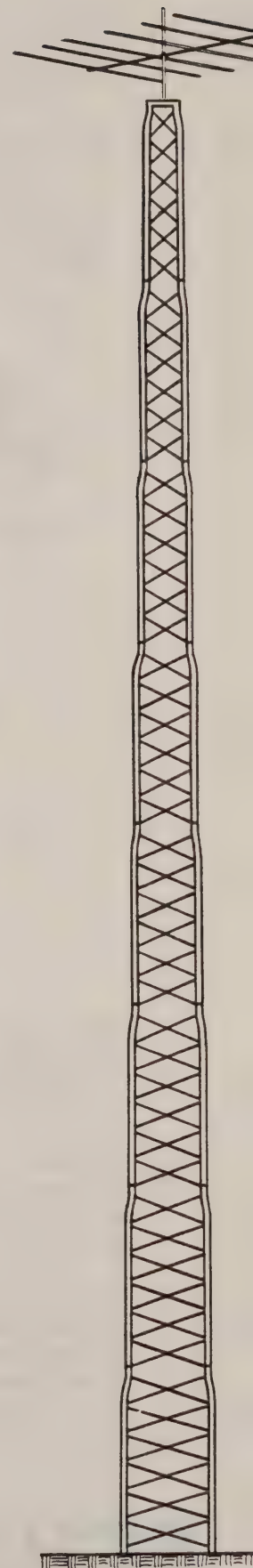
Physical properties and specifications available

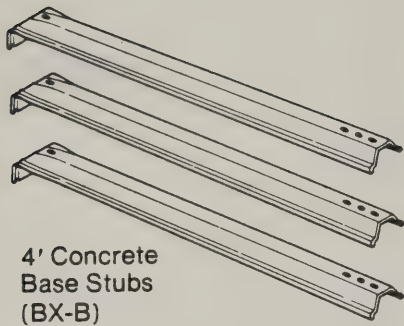
Compact Nested 48' Tower Package — takes only 2-1/2 sq. ft. floor space



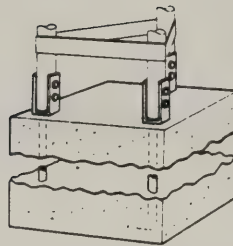
#### Towers As Packed For Shipping

BX, HBX, HDBX are shipped with: mast hardware kit (BX-MK2 or XT-2 and XR-2 for HBX, XT-3 and XR-3 for HDBX), A mast clamp (FL), 8' mast M-8).  
BASE MUST BE ORDERED SEPARATELY. Bases (BX-B, BX-HC and BX-CA) are illustrated on back page.

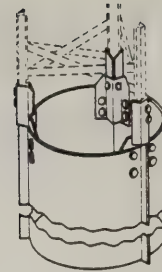




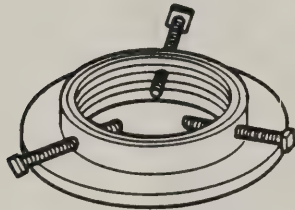
4' Concrete  
Base Stubs  
(BX-B)



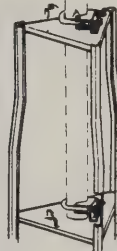
Hinged Concrete Base  
(BX-HC)



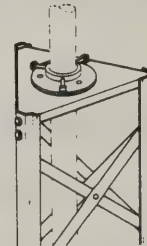
\* 4' Cylinder Base  
(BX-CA)



Heavy Duty Mast Clamp  
(FL)



Mast Hardware Kit  
(BX-MK2)



Top Plate Assembly (XT)  
Heavy Duty Mast Clamp (FL)

Tower "Package" — compact shipping and storage method. Includes all necessary parts and hardware.

All towers are recommended to be bracketed for extra safety and to withstand gusty wind conditions.

Note: Local building and/or zoning laws frequently require a building permit. Available BX Engineering Data should be submitted for approval prior to purchasing a tower.

Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

All antenna installations must be grounded per local and national codes.

The mixing of so-called interchangeable copies of ROHN products is dangerous and voids all engineering or warranty data supplied by ROHN. Materials used by the so-called copies are not the same quality and have not been tested or engineered by ROHN to conform to the same quality standards. Mixing of non-ROHN items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

**\* Not Recommended  
Convenience Item Only**

**ROHN®**

6718 West Plank Road  
P.O. Box 2000 • Peoria, Illinois 61656  
Phone: 309-697-4400



BX TOWER

<u>PART NUMBER</u>		<u>WT.</u>
<u>8' BX Sections</u>		
BX1A	Offset top section w/BXT1, BXR1, BXMK2	26
BXS1	Straight section	26
BX2	Standard offset section	23
BX2A	Offset top section w/BXT2, BXR2	26
BXS2	Straight section	24
BX3	Standard offset section	28
BX3A	Offset top section w/BXT3, BXR3	32
*BXS3	Straight section	29
BX4	Standard offset section	41
*BXS4	Straight section	42
BX5	Standard offset section	59
*BXS5	Straight section	60
BX6	Standard offset section	64
*BXS6	Straight section	65
BX7	Standard offset section	75
*BXS7	Straight section	77
BX8	Standard offset section	82
*BXS8	Straight section	84

Nuts and bolts included in section prices.

BX Accessories

BXMK2	Mast hardware kit w/rotor post for top and rotor plate	2
FL	Heavy duty mast clamp	3½
EFBX	12' aluminum erection fixture for all BX sections	22
HBX	Head only for EFBX	12
P2545	Pole only for EFBX (or EF2545)	10
BXSM	Side mount (28" - 40") w/4', 1½" OD mast (fits sections 1 thru 6 - recommend tower be guyed when using this mount)	16
WPBX	Work platform	14
BXSK1	Extra step kit for section 1	1
BXSK2	Extra step kit for section 2	1
BXSK3	Extra step kit for section 3	1

Top and Rotor Plates

BXT1	Top plate for section BX1	1
BXT2	Top plate for section BX2	1½
BXT3	Top plate for section BX3	2
BXR1	Rotor plate for section 1	1
BXR2	Rotor plate for section 2	2
BXR3	Rotor plate for section 3	2

Masts

M8	8' mast (1½")	6½
M4	4' mast (1½")	3

NOTE: When adding BXS1 or BXS2 sections to any BX tower, tower must be guyed. See #25 guy chart.

\*Discontinued

F.O.B. FRANKFORT, INDIANA

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

<u>PART NUMBER</u>	<u>WT.</u>	<u>PART NUMBER</u>	<u>WT.</u>	<u>PART NUMBER</u>	<u>WT.</u>
<u>Self-Supporting Standard BX Tower with (M8) 8' mast</u>		<u>Self-Supporting Heavy Duty BX Tower w/ (FL) mast clamp</u>		<u>Self-Supporting Extra H.D. BX Tower w/ (FL) mast clamp</u>	
BX24	84	HBX24	105	HDBX24	142
BX32	125	HBX32	164	HDBX32	206
BX40	184	HBX40	228	HDBX40	281
BX48	248	HBX48	303	HDBX48	363
BX56	323	HBX56	385		
BX64	405				

Note: Concrete base stubs not included on above towers. Order all bases as a separate item.

<u>PART NUMBER</u>		<u>WT.</u>
<u>4' Concrete Base Stubs (Set of 3) (Tower height not to exceed 64 ft.)</u>		
BXB3	Stubs for section 3	14
BXB4	Stubs for section 4	17
BXB5	Stubs for section 5	18
BXB6	Stubs for section 6	22
BXB7	Stubs for section 7	25
BXB8	Stubs for section 8	27

Self-Supporting 4' Cylinder Base  
(For use without concrete with mounting hardware)  
(Tower height not to exceed 48 ft.)

BXCA3	For use with section 3	75
BXCA4	For use with section 4	85
BXCA5	For use with section 5	95
BXCA6	For use with section 6	106
BXCHK	Cylinder base hardware kit (fits sections 3, 4, 5, & 6)	16

Note: Cylinder base not intended for use in loose soil (sand). Rohn does not recommend the use of cylinder bases. Cylinder bases are supplied as a convenience item only.

Self-Supporting Hinged Concrete Base for All Sections  
(Tower height not to exceed 64 ft.)

BXHC36	Fits sections 3 through 6	25
BXHC78	Fits sections 7 and 8	48

EX Series Bracketed Home TV BX Tower with Drive Rods,  
Base Plate, 8' Mast, and House Bracket

EX2	16' tower	76
EX3	24' tower	99
EX4	32' tower	124
EX5	40' tower	148

EX Accessories

EXR1	Universal roof mount	2
EXB1	Base plate	2
EXDR1	3' drive rods (set of 3)	8
M8	8' mast (1 1/4")	6 1/2
EXH1	Adjustable house bracket - 4" to 18" (fits sections 1, 2, 3, 4, 5, & 6)	6
EXH2	Adjustable house bracket - 8" to 24" (fits sections 1, 2, 3, 4, 5, & 6)	7

Refer to alphabetical/numerical price list for current prices.

F.O.B. FRANKFORT, INDIANA

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



"WARNING: INSTALLATION OR DISMANTLING OF THIS PRODUCT NEAR POWER LINES IS DANGEROUS. FOR YOUR SAFETY, FOLLOW THE CATALOG DIRECTIONS."

### INSTALLATION AND DISMANTLING INSTRUCTIONS -- YOU, YOUR ANTENNA, AND SAFETY

Each year hundreds of people are killed, mutilated, or receive severe permanent injuries when attempting to install or dismantle an antenna. In many of these cases, the victim was aware of the dangers of electrocution and failure but did not take adequate steps to avoid the hazard.

For your safety and to help you achieve a good installation, please READ and FOLLOW the safety precautions below. THEY MAY SAVE YOUR LIFE!

1. If you are installing or dismantling an antenna for the first time, please, for your own safety as well as others, seek PROFESSIONAL ASSISTANCE. Consult your dealer. He can explain which mounting or dismantling method to use for the size and type antenna you are about to install or dismantle.
2. Select your installation site with safety, as well as performance, in mind. (See information on Site Selection.) REMEMBER: POWER LINES AND PHONE LINES LOOK ALIKE. FOR YOUR SAFETY, ASSUME THAT ANY OVERHEAD LINES CAN KILL YOU.
3. Call your power company. Tell them your plans and ask them to look at your site. This is little inconvenience, considering YOUR LIFE IS AT STAKE.
4. Before you begin, plan your installation or dismantling procedure carefully. Successful installation or dismantling of a mast or tower is largely a matter of coordination. Each person should be assigned to a specific task and should know what to do and when to do it. One person should be designated as the "boss" to call out instructions and watch for signs of trouble.
5. When installing or dismantling your antenna, REMEMBER: DO NOT use a metal ladder. DO NOT work on a wet or windy day or if a thunderstorm is approaching. DO dress properly -- shoes with rubber soles and heels, rubber gloves, long sleeve shirt or jacket.
6. If the assembly starts to drop, get away from it and let it fall. REMEMBER: The antenna, mast, cable, and metal guy wires are all excellent conductors of electrical current. Even the slightest touch of any of these parts to a power line completes an electrical path through the antenna and the installer -- THAT'S YOU!
7. If any part of the antenna system should contact a power line -- DON'T TOUCH IT OR TRY TO REMOVE IT YOURSELF. CALL YOUR LOCAL POWER COMPANY. They will remove it safely.
8. If an electrical accident should occur -- DON'T grab hold of the person in contact with the power line or you too will be electrocuted. Use a DRY board, stick or rope to push or pull the victim away from the antenna. If the victim has stopped breathing, administer artificial respiration -- and stay with it. Have someone call for medical help.

SITE SELECTION: Before attempting to install your antenna, think where you can best place your antenna for safety and performance. To determine a safe distance from wires, power lines, and trees: 1) Measure the height of your antenna; 2) Add this length to the length of your tower or mast; and then, 3) Double this total for the minimum recommended safe distance.

If you are unable to maintain this safe distance, STOP! GET PROFESSIONAL HELP. Generally, the higher the antenna is aboveground, the better it performs. Good practice is to install your antenna above the roof line and away from power lines and obstructions. Remember that the FCC limits your CB antenna height. If possible, find a mounting place close to your set, where the antenna wire can take a short, vertical drop on the outside of the house for entry through a wall or window near the set. Your dealer carries a complete line of installation hardware.





ROHN

INSTALLATION INSTRUCTIONS

BX SELF-SUPPORTING CYLINDER BASES

1. Assemble the base as shown on Drawing C750409.
2. Place the cylinder in the area the tower is to occupy. (Note: Be sure to position the base so that the tower can be hinged in the direction where there are no obstructions.) Mark off a circle approximately 2 to 3 inches larger than the cylinder.
3. Dig a hole 4 feet deep (deep enough to completely bury the cylinder below ground level).
4. Drop the cylinder in the hole and with it as vertical as possible throw the soil back into the cylinder and around it, tamping it solid after every 6 to 8 inches of fill. (Note: Be sure cylinder is flush or below the ground surface. See Drawing C750409.)
5. When the cylinder is approximately one-half full of dirt, attach the base tower section to the pipe sleeves of the base as shown on Drawing C750409. This is necessary to avoid distortion of the cylinder as you continue to fill and tamp the soil in the base.
6. Continue to fill and tamp the soil into the cylinder to within 6 inches of the top.
7. Plumb the tower section by placing a level on the outside of each leg adjusting to the plumb position by loosening and re-aligning the BXCBI angle support brackets until the tower is plumb. (Note: The brackets must be extremely tight when the tower section is plumb.)
8. Remove the top 1/2" x 3-1/2" bolts on the pivot side of the tower that holds the pipe sleeves to the yokes. Then remove both bolts on the side opposite the pivot direction. The section can now be hinged to the ground.
9. Assemble the rest of the tower as per BX tower instructions. Hinge the tower up and when vertical put the 1/2" x 3-1/2" bolts back through the yokes and pipe sleeves. Then tighten all base bolts securely.
10. Complete filling the cylinder with dirt and tamp firmly.
11. After installation is completed, the base should be rechecked in about 30 days to be sure that the hardware remains tight and it should be rechecked every six months.
12. Towers installed in sand or gravel should be guyed or bracketed.

CAUTION ... Be sure hinge bolts on hinged type accessories are loosened before attempting to hinge tower over. All hinged type bases are recommended to be used to raise tower only without antenna. When raising and lowering tower on any hinged type base, the loads applied for hinging the tower must be applied equally on both sides of the tower in order to reduce the possibility of twist on tower and hinges at the base. Special care must be taken to avoid the use of raising and lowering methods which may cause damage to tower or hinges. Hinged bases should only be installed and dismantled by professional and experienced installers.

NOTES .....

Do not install towers near power lines. All towers should be installed out of falling distance of power lines since every electrical and telephone wire should be considered dangerous.

Rohn recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers. Only one person should be on the tower at a time.

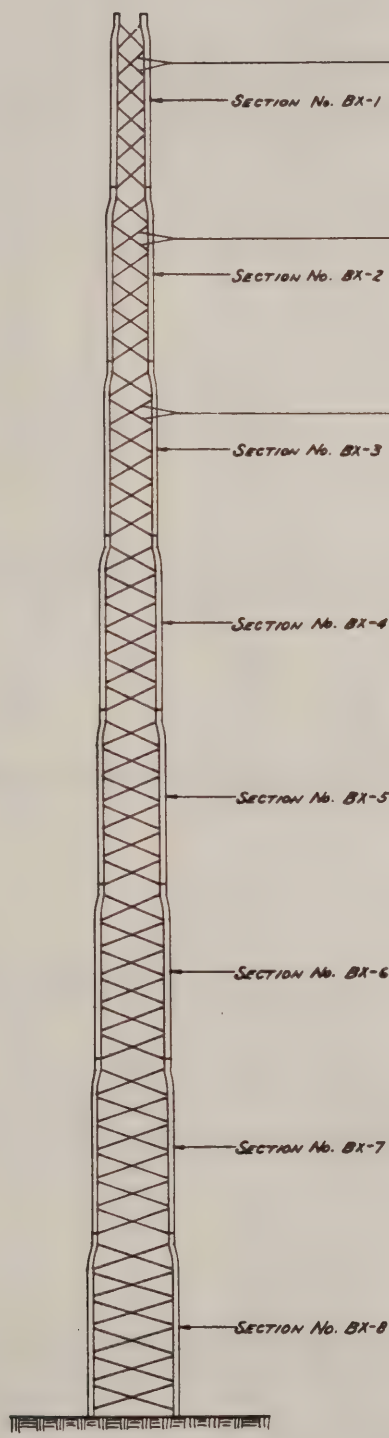
All antenna installations must be grounded per local or national codes.

All towers should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel at least twice a year and remarked with hazard and warning labels to insure safety and proper performance.







SECTION No. BX-1

SEE NOTE BELOW  
FOR OMITTED BRACES

SECTION No. BX-2

SEE NOTE BELOW  
FOR OMITTED BRACES

SECTION No. BX-3

NOTE: WHEN THIS SECTION IS USED AS THE TOP  
SECTION, THESE TWO BRACES ARE OMITTED  
(ON ONE FACE ONLY) TO ACCOMMODATE ROTOR.

SECTION No. BX-4

SECTION No. BX-5

SECTION No. BX-6

SECTION No. BX-7

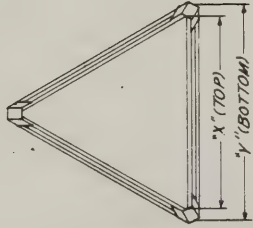
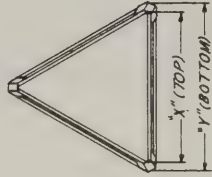
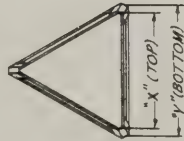
SECTION No. BX-8

REFERENCE DRAWINGS:

- SECTION No. 1: DWG. No. C-750429.
- SECTIONS 2 THRU 8: DWG. No. C-750430.
- TOP PLATE, ROTOR PLATE, & MAST
- CLAMPS: DWG. No. C-750429.
- FOUNDATION & ANCHOR BOLT SETTING FOR  
HINGED CONCRETE BASE: DWG. No. C-760099.
- CYLINDER BASE INSTALLATION FOR SECTIONS  
3, 4, 5 & 6: DWG. No. C-750409-R2.
- DESIGN ASSUMPTIONS: DWG. No. A-750005.
- TOWER SECTION PROPERTIES: DWG. No. B-760026.
- TOWER DESIGN DATA: DWG. No. B-760025.
- TYPICAL TOWER ANALYSIS: DWG. No. A-760000.
- ALLOWABLE ANTENNA LOADS: DWG. No. A-760001.

NO.	DESCRIPTION	DATE	BY
<div style="text-align: center;"> <b>ROHN® MANUFACTURING</b>  <small>DIVISION OF</small>  </div>			
<b>TITLE</b> <div style="text-align: center;"> <b>BX SERIES TOWER</b>  <b>TYPICAL 64' TOWER (SECTIONS 1 THRU 8)</b> </div>			
<small>THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.</small>			
SCALE	MATERIAL	FINISH	WT.
NONE	6-6-75		
DATE	DATE	DATE	DATE
AED	2-2-76	2-18-76	12-19-76
CHK. BY	CHK. BY	CHK. BY	CHK. BY
DH	DH	DH	DH
APP'D	APP'D	APP'D	APP'D
12/1/75	12/1/75	12/1/75	12/1/75
<small>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE GIVEN IN INCHES.</small>			<small>DWG. NO.</small> <b>C-750428</b>

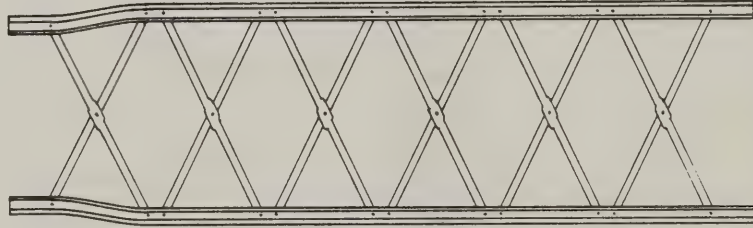
NOTE: SEE DWG. NO. C-750429 FOR DETAILS OF TYPICAL TOP PLATE AND RIGID PLATE FOR SECTIONS 2 AND 3.



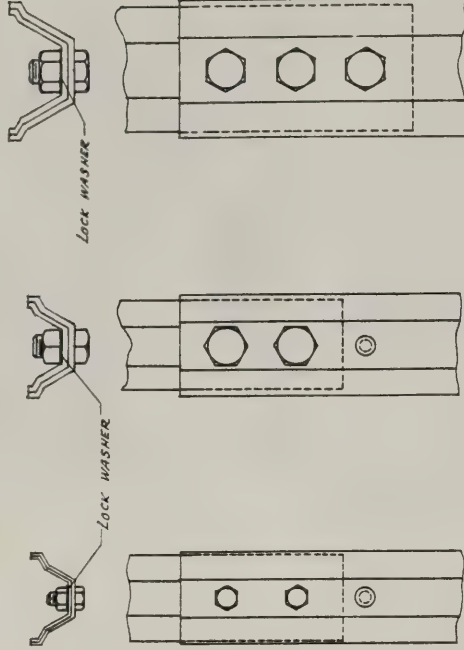
SECTIONS 2, 3, 4



SECTIONS 5, 6



SECTIONS 7, 8



TYPICAL LEG JOINT  
BETWEEN  
SECTIONS 1-2  
SECTIONS 2-3

TYPICAL LEG JOINT  
BETWEEN  
SECTIONS 3-4  
SECTIONS 4-5  
SECTIONS 5-6  
SECTIONS 6-7

TYPICAL LEG JOINT  
BETWEEN  
SECTIONS 7-8

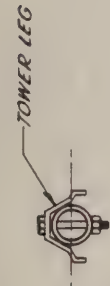
SECTION No.	LEG JOINT BOLTS		"X" (Top)	"Y" (Bottom)
	LOCATION	SIZE		
BX-2	Top	2 $\frac{3}{8}$ x $\frac{3}{4}$	10 $\frac{7}{16}$	12 $\frac{11}{16}$
	Bottom	2 $\frac{3}{8}$ x $\frac{3}{4}$		
BX-3	Top	2 $\frac{3}{8}$ x $\frac{3}{4}$	12 $\frac{13}{16}$	15 $\frac{1}{2}$
	Bottom	2 $\frac{3}{8}$ x $\frac{3}{4}$		
BX-4	Top	2 $\frac{3}{8}$ x $\frac{3}{4}$	15 $\frac{3}{16}$	17 $\frac{7}{16}$
	Bottom	2 $\frac{3}{8}$ x $\frac{3}{4}$		
BX-5	Top	2 $\frac{3}{8}$ x $\frac{3}{4}$	17 $\frac{5}{8}$	20 $\frac{1}{2}$
	Bottom	2 $\frac{3}{8}$ x $\frac{3}{4}$		
BX-6	Top	2 $\frac{3}{8}$ x $\frac{3}{4}$	20 $\frac{5}{16}$	22 $\frac{13}{16}$
	Bottom	2 $\frac{3}{8}$ x $\frac{3}{4}$		
BX-7	Top	2 $\frac{3}{8}$ x $\frac{3}{4}$	23	25 $\frac{1}{2}$
	Bottom	2 $\frac{3}{8}$ x $\frac{3}{4}$		
BX-8	Top	3 $\frac{3}{8}$ x $\frac{3}{4}$	25 $\frac{11}{16}$	28 $\frac{7}{16}$
	Bottom	3 $\frac{3}{8}$ x $\frac{3}{4}$		

NOTE: FOR STRAIGHT SECTIONS ELIMINATE "X" DIMENSION.

NO.	DESCRIPTION	DATE	BY
REVISIONS			
<b>ROHN® MANUFACTURING</b> DIVISION OF			
<b>BX SERIES TOWER</b> (SECTIONS 2 THROUGH 8)			
TITLE			FILE NO.
THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.			
SCALE	MATERIAL	FINISH	BY
DATE	DATE	DATE	DATE
BY	BY	BY	BY
APP'D.	APP'D.	APP'D.	APP'D.
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE GIVEN IN INCHES.		DWG. NO.	
TOLERANCES		C-750430	
FRACTIONS		1/8 1/16 1/32	
DECIMALS		.0005 .001 .002 .005 .010 .015 .020 .030 .040 .050 .060 .070 .080 .090 .100 .125 .150 .175 .200 .250 .300 .375 .500 .625 .750 .875 1.000	
ANGLES		15° 30° 45° 60° 75° 90° 105° 120° 135° 150° 165° 180°	

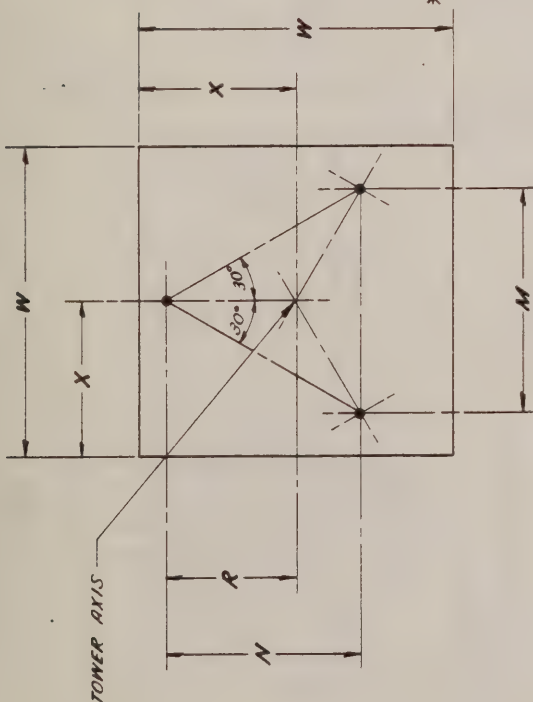
ELEVATIONS OF TYPICAL SECTIONS





## FOUNDATION NOTES

1. CONCRETE, 3000 P.S.I. MIN. ULT. STRENGTH
2. ASTM A-615 GRADE 40 DEFORMED RE-BARS
3. ALL FORMS MUST BE REMOVED FROM CONCRETE BEFORE PLACING COMPACTED BACKFILL.
4. FOUNDATIONS DESIGNED FOR 2000 PSF SOIL.
5. IT IS RECOMMENDED THAT A WOOD TEMPLATE BE CONSTRUCTED BY THE USER FOR HOLDING ANCHOR BOLTS AT THE PROPER DIM'S WHILE CONC. IS BEING POURED.
- \* 6. REINFORCING IS RECOMMENDED FOR TEMPERATURE & SHRINKAGE CONTROL.



MAX. BOLT PROJ. (SEE CHART)

ANCHOR BOLT (3 REQ'D - SEE CHART)



NO. 3 BARS 12" O.C. EACH WAY  
TOP & BOTTOM OR 6x6 3/16" \*  
WELDED WIRE FABRIC

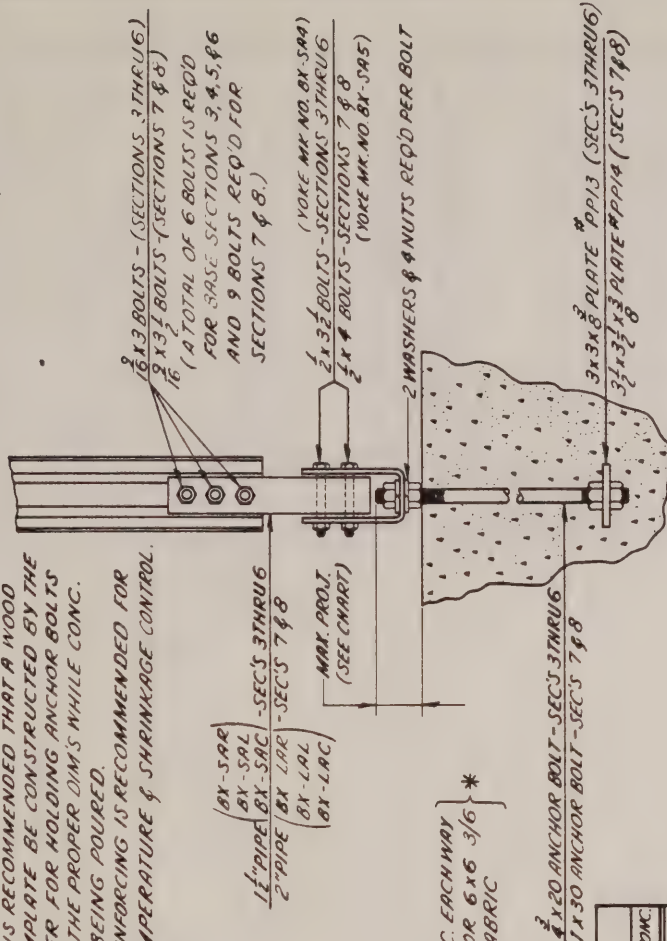
3" CLEARANCE (TYP.)

## 3 FT. THICK PAD FOUNDATION

SEC. NO.	M	N	R	MAX. PROJ.	ANCHOR BOLT BEARING	D	W	X	CU YDS. CONC.
3	13 3/16"	11 1/2"	7 1/8"	2 5/8"	5-3/4" x 20"	PP13	3'-0"	3'-9"	1'-10 1/2"
4	15 1/16"	13 3/16"	9 1/8"	2 5/8"	3-3/4" x 20"	PP13	3'-0"	4'-3"	2'-1 1/2"
5	18 1/16"	15 3/16"	10 3/8"	2 5/8"	3-3/4" x 20"	PP13	3'-0"	4'-9"	2'-4 1/2"
6	21 1/16"	18 1/16"	12 3/8"	2 5/8"	3-3/4" x 20"	PP13	3'-0"	5'-3"	2'-7 1/2"
7	23 1/16"	20 1/16"	13 3/8"	3 1/4"	3-1" x 30"	PP14	3'-0"	6'-0"	3'-0"
8	26 3/16"	22 1/16"	15 3/8"	3 1/4"	3-1" x 30"	PP14	3'-0"	6'-6"	3'-3"

## 4 FT. THICK PAD FOUNDATION

SEC. NO.	M	N	R	MAX. PROJ.	ANCHOR BOLT BEARING	D	W	X	CU YDS. CONC.
3	13 3/16"	11 1/2"	7 1/8"	2 5/8"	3-3/4" x 20"	PP13	4'-0"	3'-6"	1'-9"
4	15 1/16"	13 3/16"	9 1/8"	2 5/8"	3-3/4" x 20"	PP13	4'-0"	4'-0"	2'-0"
5	18 1/16"	15 3/16"	10 3/8"	2 5/8"	3-3/4" x 20"	PP13	4'-0"	4'-6"	2'-3"
6	21 1/16"	18 1/16"	12 3/8"	2 5/8"	3-3/4" x 20"	PP13	4'-0"	4'-9"	2'-4 1/2"
7	23 1/16"	20 1/16"	13 3/8"	3 1/4"	3-1" x 30"	PP14	4'-0"	5'-3"	2'-7 1/2"
8	26 3/16"	22 1/16"	15 3/8"	3 1/4"	3-1" x 30"	PP14	4'-0"	5'-9"	2'-10 1/2"



16 1/2" BOLTS - (SECTIONS 3 THRU 6)  
9 1/2" BOLTS - (SECTIONS 7 & 8)  
(A TOTAL OF 6 BOLTS IS REQ'D  
FOR BASE SECTIONS 3, 4, 5, & 6  
AND 9 BOLTS REQ'D FOR  
SECTIONS 7 & 8.)

2 1/2" x 3 1/2" BOLTS - (SECTIONS 3 THRU 6)  
(YOKE MK. NO. BX-S94)  
2 1/2" x 3 1/2" BOLTS - (SECTIONS 7 & 8)  
(YOKE MK. NO. BX-D95)

2 WASHERS & 4 NUTS REQ'D PER BOLT

3 1/2" x 3 1/2" PLATE # PP13 (SECS 3 THRU 6)  
3 1/2" x 3 1/2" PLATE # PP14 (SECS 7 & 8)

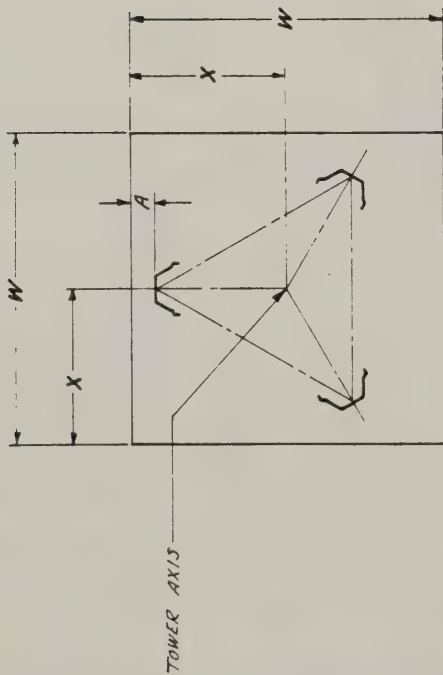
No.	Revision	Description	Date	By
R1	REVISED	PLANS IN BEARING COLUMN	11/17/73	GLS
R2	PLANS	PP13 & PP14 WERE PL. JOE PL. 3/5	11/27/73	GLS
R3	ADDED	YOKE MK. NO. 95 REVISED PL. NO. 405	11/27/73	GLS

Unarco-Rohn

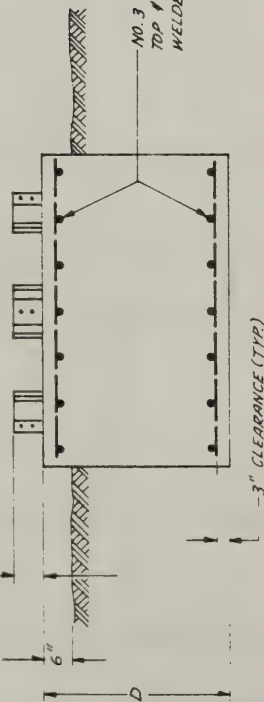
Division of Unarco Industries, Inc.

## FOUNDATION & ANCHOR BOLT DETAILS

Scale	Drawn by	Checked by	Approved by Engineering	Approved by Production	Approved by Sales	Drawing Number
NONE	Q.H.	A.F.D.	Q.H.	Q.H.	Q.H.	C-760099 R3



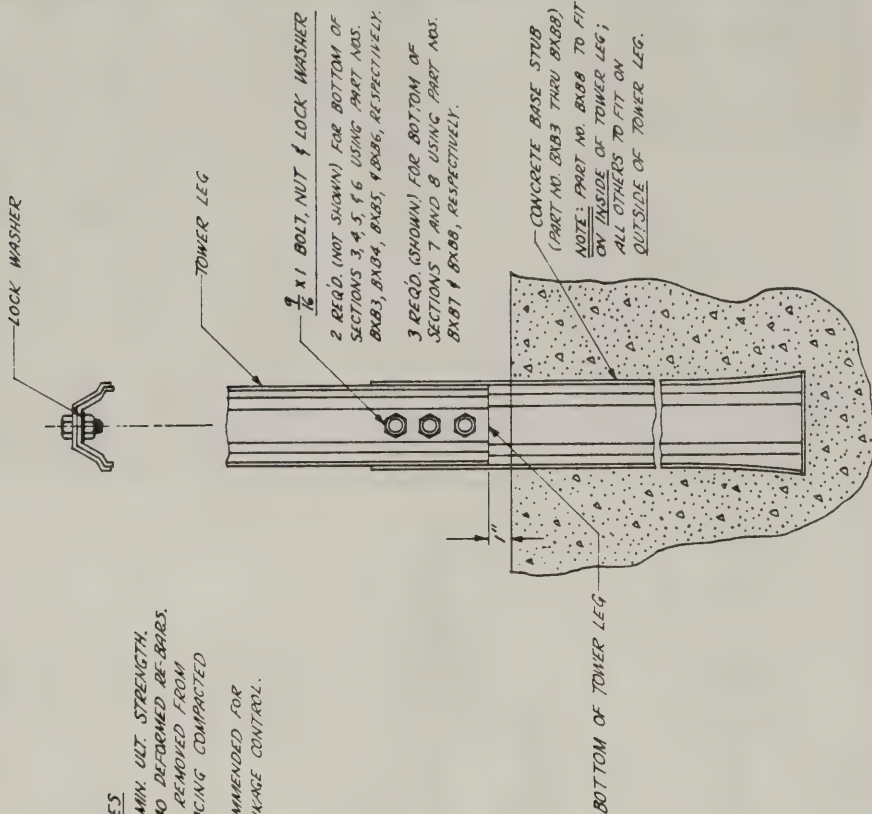
PROTECTION: 4" FOR PART NOS. 8XB3, 8XB4, 8XB5, 8XB6  
6" FOR PART NOS. 8XB7 & 8XB8



\* NO. 3 BARS 12" O.C. EACH WAY  
TOP & BOTTOM OR 6 x 6 3/6  
WELDED WIRE FABRIC

### FOUNDATION NOTES

1. CONCRETE, 3000 PSI MIN. ULT. STRENGTH.
2. ASTM A-615 GRADE 40 DEFORMED RE-BARS.
3. ALL FORMS MUST BE REMOVED FROM CONCRETE BEFORE PLACING COMPACTED BACKFILL.
- \* 4. REINFORCING IS RECOMMENDED FOR TEMPERATURE & SHRINKAGE CONTRL.



FOUNDATION PAD					
SECT. NO.	W	X	D	CU. YDS. CONCR.	A
3	3'-6"	1'-9"	4'-0"	1.8	1'-0 1/2"
4	4'-0"	2'-0"	4'-0"	2.4	1'-2"
5	4'-6"	2'-3"	4'-0"	3.0	1'-3 1/2"
6	4'-9"	2'-4 1/2"	4'-0"	3.4	1'-3 3/4"
7	5'-3"	2'-7 1/2"	4'-0"	4.1	1'-4 3/4"
8	5'-9"	2'-10 1/2"	4'-0"	4.9	1'-6"

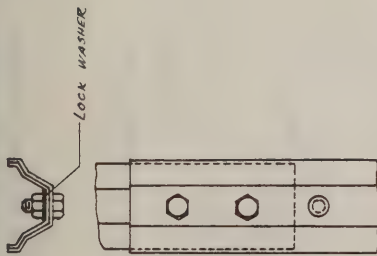
No. 1 Revision 1 Description 1 Date 5-24-78 By Unarco-Rohn  
Division of Unarco Industries Inc.

### FOUNDATION FOR CONCRETE BASE STUBS FOR BX TOWER

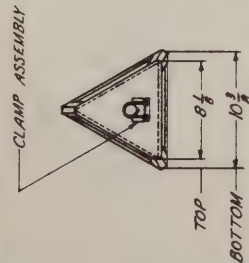
Scale	None	Tolerances	Decimals	Fractions	Angles	Weight
Drawn by	AED	Date	4-5-78	Finish		
Checked by	DA	Date	5-24-78	Material		
Approved by Engineering	CW	Date	5-24-78	This drawing is the property of Unarco-Rohn. It is not to be reproduced, stored, or used in any way without written consent.		
Approved by Production		Date		File Number		

Approved by Sales RAK Date 5-24-78 Drawing Number C780284





NOTE: FOR STRAIGHT SECTION ELIMINATE  $\phi \frac{1}{8}$  DIMENSION



TOP PLATE



THIS BAY OF BRACES IS OMITTED (ONE FACE ONLY) TO ACCOMMODATE ROTOR. THIS WOULD BE TYPICAL OF SECTION 2 OR 3 WHEN EITHER IS USED AS A TOP SECTION.

STEPS (TOP SECTION OF TOWER) (AVAILABLE FOR SECTIONS 1, 2, 13 ONLY)

SECTION 1

TOP PLATE FOR SECTION 1 IS RIVETED TO OUTSIDE OF TOWER LEGS.  
TOP PLATE FOR SECTION 2 OR 3 IS BOLTED TO INSIDE OF TOWER LEGS.

MAST

SLEEVE TO BE USED WHEN ROTOR IS INSTALLED INSIDE OF TOWER.

CLAMP ASSEMBLY

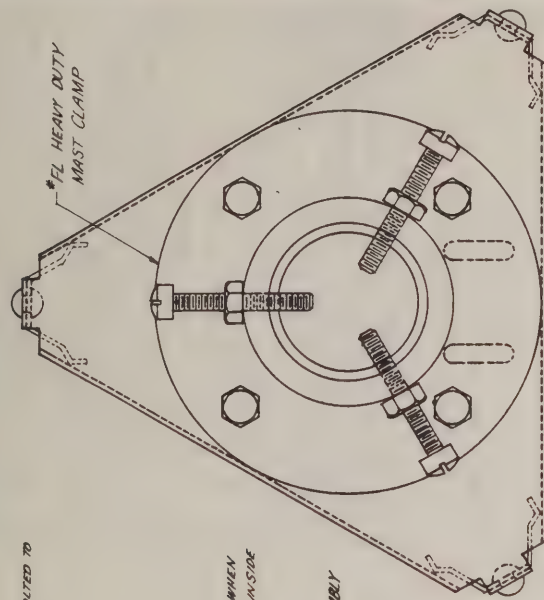
TOP PLATE WITH CLAMP ASSEMBLY

NOTE:

THE CLAMP ASSEMBLY IS NORMALLY USED WITH SECTION 1 AS A TOP SECTION. THE  $\frac{1}{2}$  INCH DUTY MAST CLAMP IS NORMALLY USED WITH SECTION 2 OR 3 AS A TOP SECTION. HOLES ARE PLACED ON ALL TOP PLATES AND ROTOR PLATES, HOWEVER, TO ACCOMMODATE EITHER ONE.

LOWER MAST CLAMP ASSEMBLY NOT USED FOR IN-LINE MODEL ROTOR WHEN MOUNTED DIRECTLY TO ROTOR PLATE.

ROTOR PLATE WITH CLAMP ASSEMBLY



NO.	DESCRIPTION	DATE	BY
REVISIONS			
<b>ROHN® MANUFACTURING</b> DIVISION OF			
<b>BX SERIES TOWER</b> (SECTION 1)			
TITLE			
THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.			
SCALE	AS SHOWN	DATE	BY
DATE	6-6-75	DATE	6-6-75
DESIGNED BY	AW	DATE	2-5-76
APPROVED BY	AW	DATE	2-17-76
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE GIVEN IN INCHES.		DWG. NO.	
		C-750429	

BILL OF MATERIAL

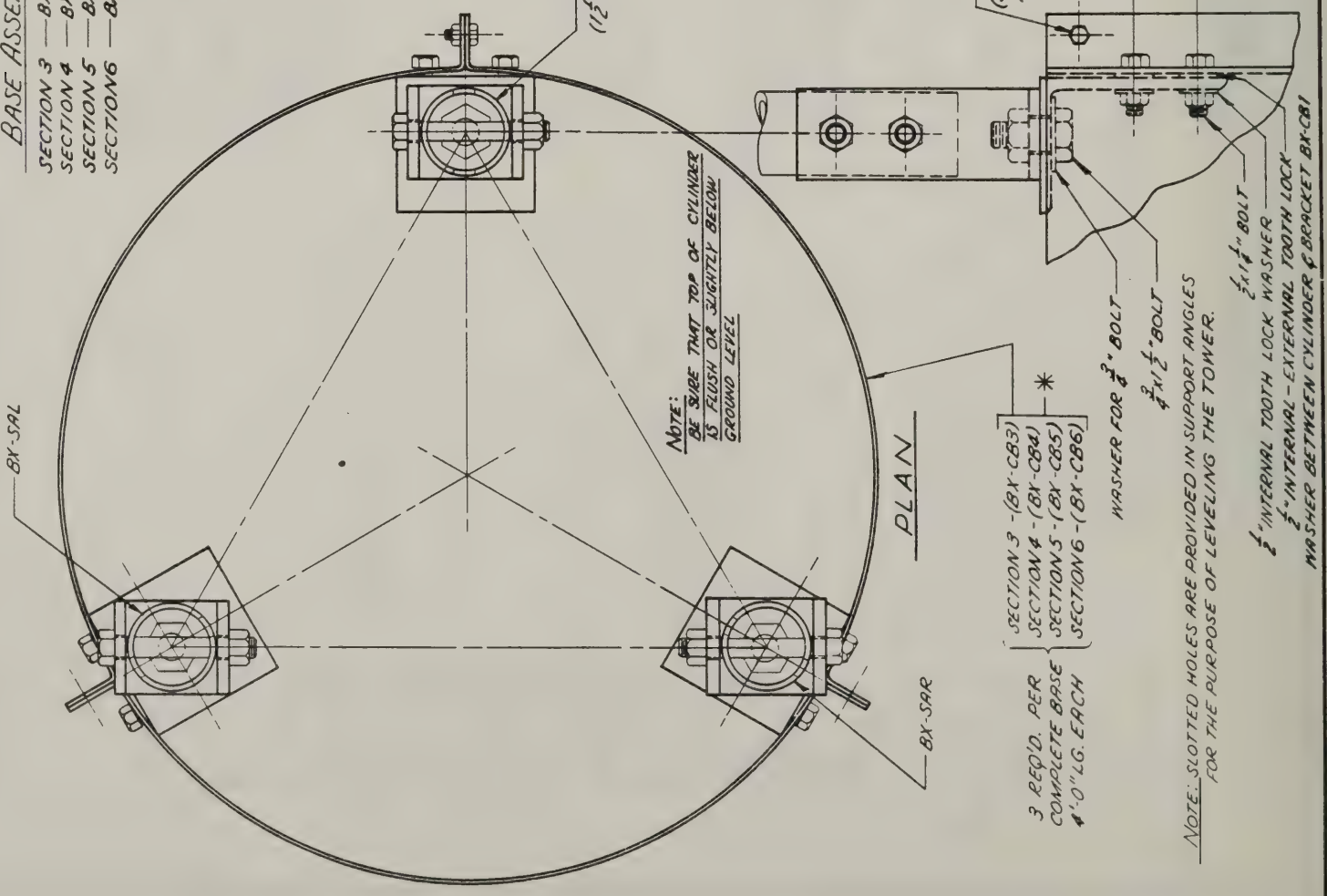
ITEM	QTY.	UNIT	MARK NO.	DESCRIPTION	DWG. NO.
1	3		*	CYLINDER SEC. 4 LG. (SEE DWG. PLAN)	C-750410
2	3		BX-CB1	ANGLE SUPPORT BRACKET	C-750410
3	3		BX-SA4	ATTACHMENT YOKE	C-750376
4	1		BX-SAC	CENTER SLEEVE (1 1/2" PIPE)	C-750376
5	1		BX-SAR	RIGHT SIDE SLEEVE (1 1/2" PIPE)	C-750376
6	1		BX-SAL	LEFT SIDE SLEEVE (1 1/2" PIPE)	C-750376
7	1		220074	1/4 x 1/2 BOLT KIT, EP (15/KIT)	
8	12		210076	1/2 x 1 1/4 BOLT	
9	3		210045G	3/4 x 1 1/2 BOLT	
10	6		210025G	1/2 x 3 3/8 BOLT	
11	6		220081	9/16 x 3 BOLT, EP	
12	12		250023	1/2 INTERNAL TOOTH LOCK WASHER	
13	12		250024	1/2 INT. - EXT. TOOTH LOCK WASHER	
14	18		230013	1/2 NUT	
15	3		230020	3/4 NUT	
16	6		240029	9/16 NUT, EP	
17	3		250017G	3/4 WASHER	

BASE ASSEMBLY NO.'S

- SECTION 3 — BX-CA3
  - SECTION 4 — BX-CA4
  - SECTION 5 — BX-CA5
  - SECTION 6 — BX-CA6
- W/HARDWARE

BX-SAL

- SECTION 3 — (BX-CB3)
  - SECTION 4 — (BX-CB4)
  - SECTION 5 — (BX-CB5)
  - SECTION 6 — (BX-CB6)
- 3 REQ'D. PER COMPLETE BASE  
4'-0" LG. EACH



TOWER LEG (2-1/8 x 3 LG. BOLTS REQ'D. FOR FASTENING 1 1/2" PIPE TO BASE SECTION LEG)

1 1/2" PIPE SLEEVE TO BE BOLTED ON INSIDE OF BASE SECTION LEGS

BX-SA4 ATTACHMENT YOKE

2 x 3/8" BOLTS REQ'D  
SUPPORT BRACKET BX-CB1

1/4 x 1/2 BOLT  
(5 BOLTS @ 3 LOCATIONS)

WASHER FOR 3/8" BOLT  
3/4 x 1 1/2" BOLT

1/2" INTERNAL TOOTH LOCK WASHER  
1/2" INTERNAL - EXTERNAL TOOTH LOCK WASHER BETWEEN CYLINDER & BRACKET BX-CB1

NOTE:  
BE SURE THAT TOP OF CYLINDER IS FLUSH OR SLIGHTLY BELOW GROUND LEVEL

PLAN

3 REQ'D. PER COMPLETE BASE  
4'-0" LG. EACH

NO.	DESCRIPTION	DATE	BY
1	ADDED GROUND SURFACE NOTE	3-22-79	AED
2	CHANGED BILL OF MATERIAL (ADDED MARKING)	7-5-78	AED
3	REVISED ASSEMBLY NOS.	2-12-76	DM
4	ADDED ITEM NO. 11 IN PARTS LIST	2-1-76	DM
5	REVISED BOLT SIZES & LENGTH	1-21-76	DM

ROHN<sup>®</sup> MANUFACTURING  
DIVISION OF

TITLE  
CYLINDER BASE INSTALLATION FOR  
MODEL BX TOWER SECTIONS 3, 4, 5, 6

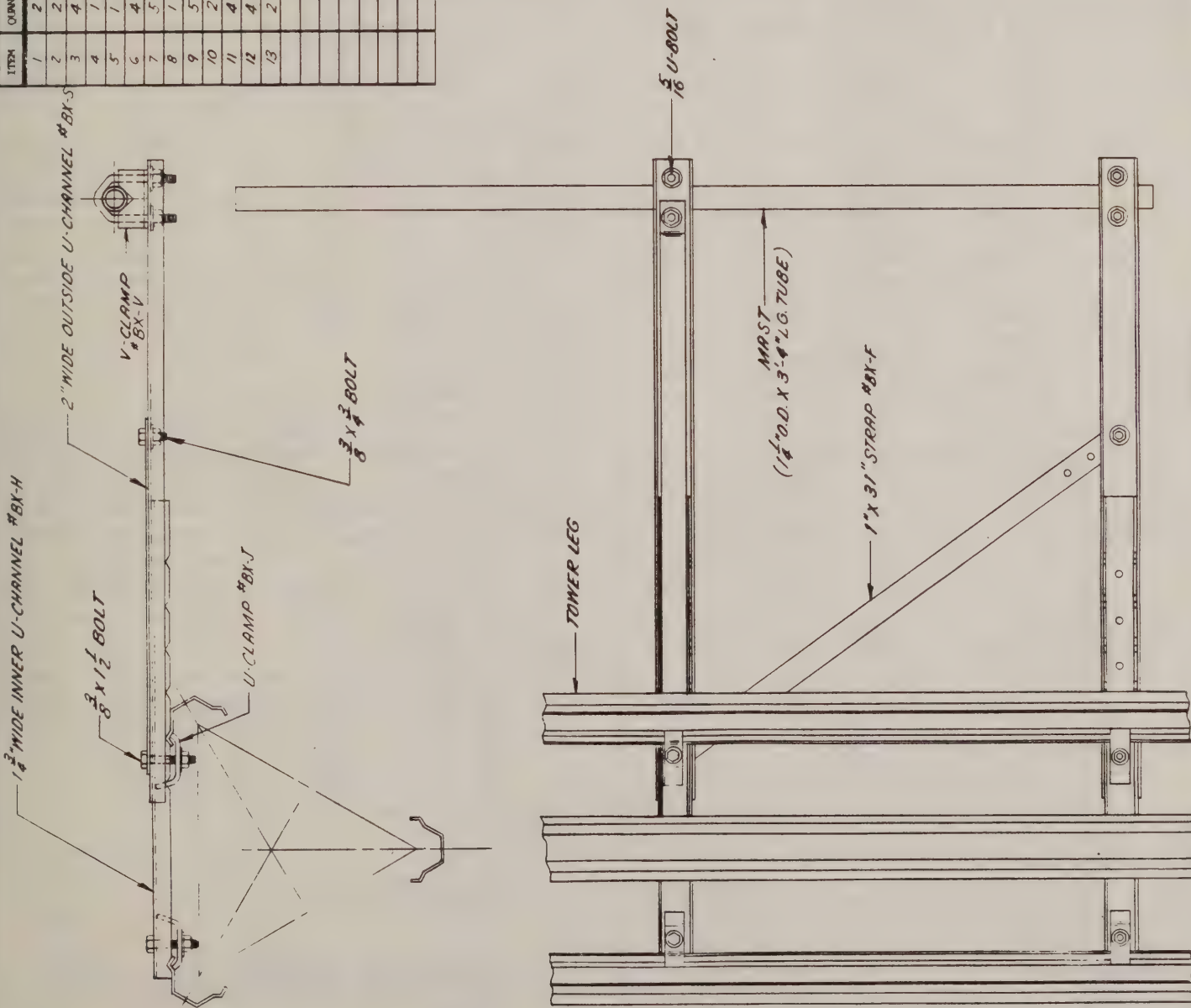
THIS DRAWING IS THE PROPERTY OF ROHN & COMPANY. IT IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT OUR WRITTEN CONSENT.		FILE NO.
SCALE	MATERIAL	FINISH
DATE	6-8-75	DATE
DRW. BY	DM	DATE
CHK. BY	AED	DATE
APP. BY	DM	DATE
APP. BY	DM	DATE
DWG. NO.		C-750409



1 3/4" WIDE INNER U-CHANNEL #BX-H

[illegible]

NOTE: WASHERS SUPPLIED FOR ALL BOLTS.



R2 ADDED BILL OF MAT'L.; DELETED BACK BRACE 2-23-77 ALD  
R1 ADDED PART NO'S. 1-27-77 QNY

No	Δ	Revision	Description
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**Unarco-Rohn**  
Division of Unarco Industries, Inc.

BX-SM MOUNT ASSEMBLY

Scale	~	Drawn by	Q. A.	Date	10-9-75
		Checked by	W. B.	Date	10-20-75
		Approved by	W. B.	Date	10-20-75
		Produced by	C. W.	Date	10-10-75

Unless otherwise specified, dimensions are given in inches.

Tolerance	Fractions	Angles
±	±	±
Material	Finish	Weight

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File Number

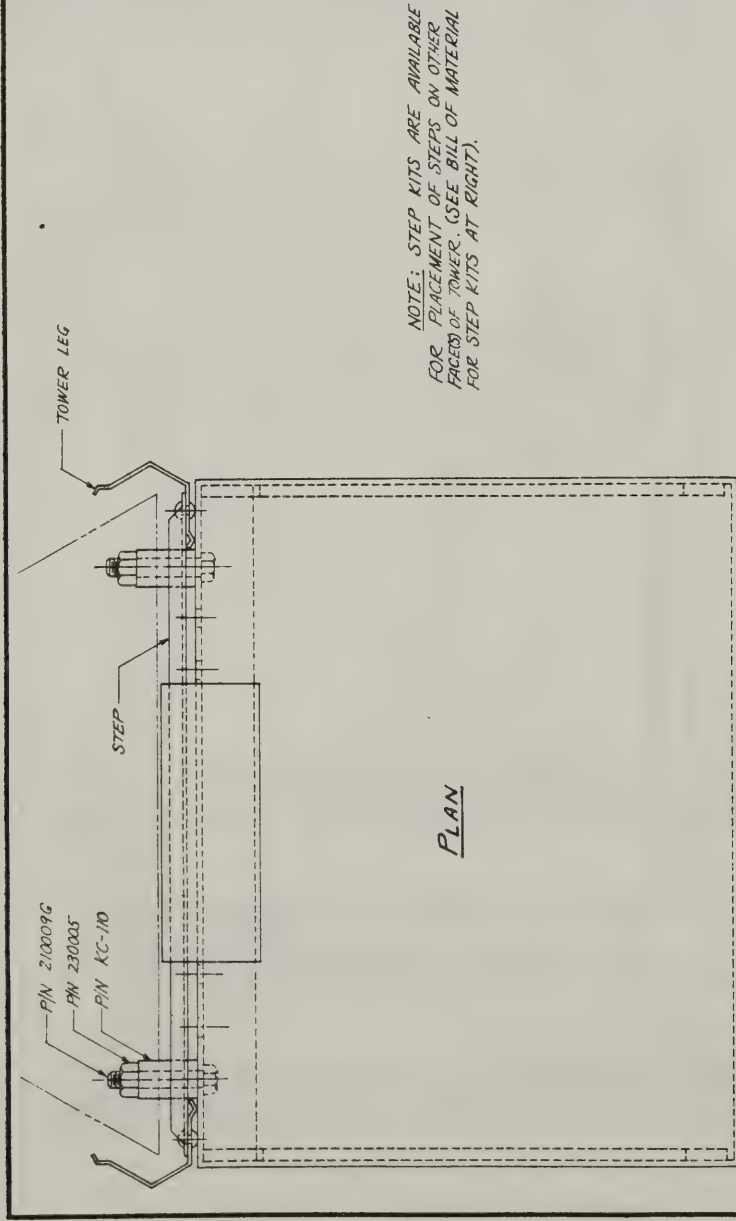
Approved by Sales

Date \_\_\_\_\_

Accounting Department

○ ○ ○ ○ ○

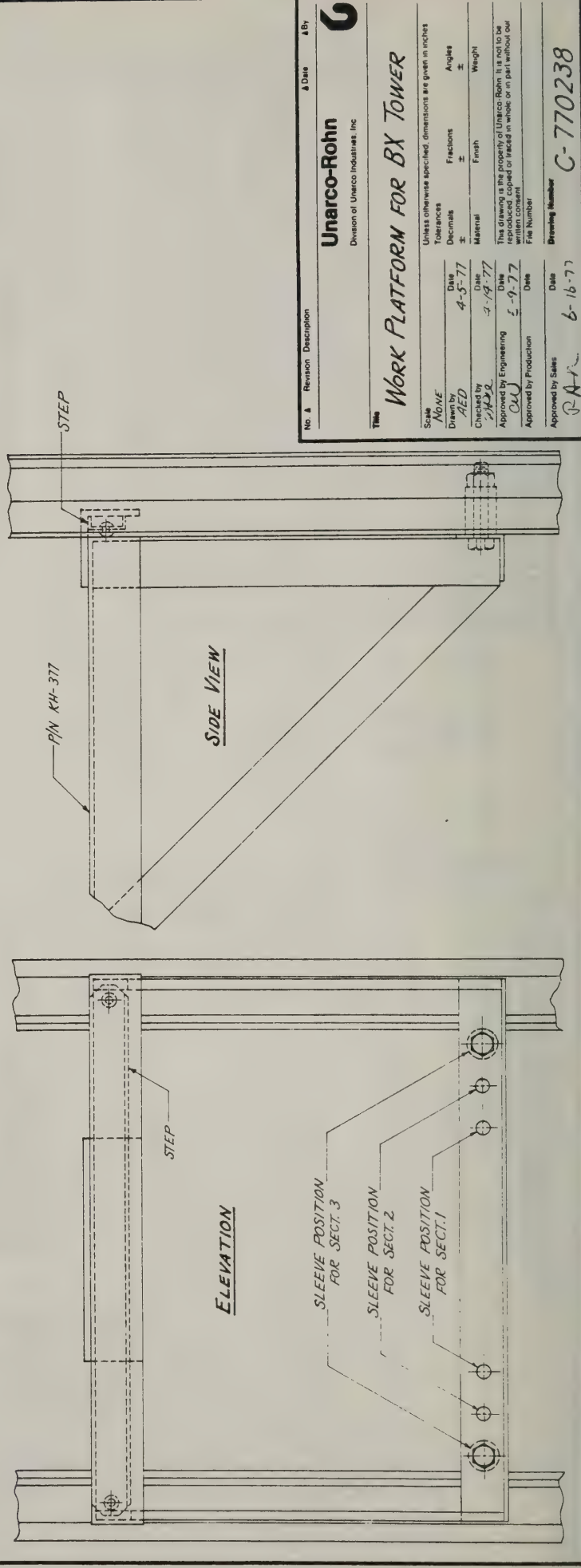
BILL OF MATERIAL (WORK PLATFORM)			
ITEM	QTY	PART NO.	DESCRIPTION
PART NO. WP-BX (WORK PLATFORM) HAS THE FOLLOWING COMPONENTS:			
1	2	210009G	$\frac{3}{4}$ x 2 BOLT
2	2	230005	$\frac{3}{8}$ NUT
3	2	KC-110	TS $\frac{3}{8}$ O.D. x .187 ( $\frac{1}{4}$ " LONG)
4	1	KH-377	PLATFORM
			C-770237



NOTE: STEP KITS ARE AVAILABLE FOR PLACEMENT OF STEPS ON OTHER FACETS OF TOWER. (SEE BILL OF MATERIAL FOR STEP KITS AT RIGHT).

BILL OF MATERIAL (STEP KITS)(OPTIONAL)			
ITEM	QTY	PART NO.	DESCRIPTION
PART NO. BX-SK1 (STEP KIT FOR SECT.1) HAS THE FOLLOWING COMPONENTS:			
6	220090	NO.8 x $\frac{1}{4}$ RD. HD. MACHINE SCREW	
6	240033	NO.8 NUT	
3	BX-15	STEP	B-751153 R1
PART NO. BX-SK2 (STEP KIT FOR SECT.2) HAS THE FOLLOWING COMPONENTS:			
6	220090	NO.8 x $\frac{1}{4}$ RD. HD. MACHINE SCREW	
6	240033	NO.8 NUT	
3	BX-25	STEP	B-751153 R1
PART NO. BX-SK3 (STEP KIT FOR SECT.3) HAS THE FOLLOWING COMPONENTS:			
6	220090	NO.8 x $\frac{1}{4}$ RD. HD. MACHINE SCREW	
6	240033	NO.8 NUT	
3	BX-35	STEP	B-751153 R1

PLAN



No. 1	Revision	Description	Date	By
<div> <div>Unarco-Rohn</div> <div>Division of Unarco Industrial, Inc.</div> </div>				
<div> <div>Work Platform for BX Tower</div> </div>				
<div> <div>Scale: NONE</div> <div> <div>Tolerances</div> <div> <div>Decimals</div> <div>Fractions</div> <div>Angles</div> </div> </div> </div>				
<div> <div>Drawn by: AED</div> <div> <div>Date: 4-5-77</div> <div>Checked by: JHJ</div> <div>Date: 4-14-77</div> </div> </div>				
<div> <div>Approved by Engineering: CW</div> <div> <div>Date: 5-9-77</div> <div>Approved by Production:</div> </div> </div>				
<div> <div>Approved by Sales: RAN</div> <div> <div>Date: 6-16-77</div> <div>Drawing Number: C-770238</div> </div> </div>				



# TYPICAL TOWER ANALYSIS

## TOWER DESIGN DATA: MODEL BX-64

WIND PRESSURE — 20 PSF

ANTENNA LOAD — 6 SQ. FT. AT 3 FT. ABOVE

TOWER TOP —  $\frac{1}{2}$  IN. LINE

ANTENNA WT. = 50 LBS.

LINE WT. = 0.5 LBS./FT.

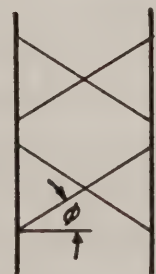
NOTE: ANTENNAS DEVELOPING A LARGE TWISTING MOMENT DUE TO WIND MUST NOT BE USED ON THIS TOWER. ANTENNAS SHOULD BE LIMITED TO THOSE HAVING A MAXIMUM BOOM LENGTH OF 10 FT.

SECTION No.	8	7	6	5	4	3	2	1
DISTANCE FROM TOP (FT.)	61.7	53.7	46.0	38.3	30.7	23.0	15.3	7.7
WIND ON SECTION (LBS.)	179.7	161.7	150.0	139.5	115.5	107.7	101.1	96.0
WIND ON ANTENNA & LINE (LBS.)	5.5	5.3	5.3	5.3	5.3	5.3	5.3	127.4
TOTAL WIND ON SECTION (LBS.)	185.2	167.0	155.3	144.8	120.8	113.0	106.4	223.4
SHEAR (LBS.)	1215.9	1030.7	863.7	708.4	563.6	442.8	329.8	223.4
MOMENT (FT.-LBS.)	37,770	28,790	21,530	15,500	10,620	6770	3810	1690
FACE WIDTH (FT.)	2.284	2.047	1.824	1.602	1.381	1.184	.989	.794
.866 × FACE WIDTH (FT.)	1.978	1.773	1.580	1.388	1.196	1.025	.856	.688
LEG LOAD (LBS.) <sup>①</sup>	19,100	16,240	13,630	11,170	8880	6600	4450	2460
SECTION WEIGHT (LBS.)	82	75	64	59	41	28	23	22
TOTAL WEIGHT (LBS.)	476	390	312	244	181	136	104	77
*LEG LOAD WITH WEIGHT (LBS.)	19,260	16,370	13,730	11,250	8940	6650	4490	2480
SHEAR ONE FACE (LBS.) <sup>②</sup>	815	691	579	475	378	297	221	150
COS $\phi$	.904	.883	.858	.827	.783	.733	.667	.580
*LOAD EACH BRACE (LBS.) <sup>③</sup>	451	391	337	287	241	203	166	129

$$\textcircled{1} \text{ LEG LOAD} = \frac{\text{MOMENT}}{.866 \times \text{FACE WIDTH}}$$

$$\textcircled{2} \text{ SHEAR ONE FACE} = .67 \times \text{SHEAR}$$

$$\textcircled{3} \text{ LOAD EACH BRACE} = \frac{\text{SHEAR ONE FACE}}{2 \times \cos \phi}$$



\* REFER TO DWG. No. B-760025 FOR ALLOWABLE LOADS OF MEMBERS & CONNECTIONS.

# MODEL BX TOWER

## ALLOWABLE ANTENNA LOADS \*

WIND PRESSURE = 20 PSF (70.7 MPH)

NOMINAL HEIGHT, FT.	COMBINATION OF TOWER SECTIONS	CATALOG No.	AREA, SQ. FT.	THRUST, LBS.
24	BX-1-2-3	BX 24	6	120
	BX-2-3-4	HBX 24	12	240
	BX-3-4-5	HDBX 24	20	400
32	BX-1-2-3-4	BX 32	6	120
	BX-2-3-4-5	HBX 32	12	240
	BX-3-4-5-6	HDBX 32	18	360
40	BX-1-2-3-4-5	BX 40	6	120
	BX-2-3-4-5-6	HBX 40	10	200
	BX-3-4-5-6-7	HDBX 40	18	360
48	BX-1-2-3-4-5-6	BX 48	6	120
	BX-2-3-4-5-6-7	HBX 48	10	200
	BX-3-4-5-6-7-8	HDBX 48	18	360
56	BX-1-2-3-4-5-6-7	BX 56	6	120
	BX-2-3-4-5-6-7-8	HBX 56	10	200
64	BX-1-2-3-4-5-6-7-8	BX 64	6	120

\* THIS LOAD CAN BE APPLIED AT A POINT 3 FT.  
ABOVE THE APEX OF THE TOWER IN ADDITION TO  
THE GIVEN WIND PRESSURE ACTING ON THE TOWER.

NOTE: ANTENNA TYPES SHOULD BE LIMITED TO  
THOSE HAVING A MAXIMUM BOOM LENGTH OF 10 FT.

DWG. No. A-760001



PARTS LIST P-285  
(Replaces P-283)

September 1, 1977

B X T O W E R

TOWERS AS PACKAGED FOR SHIPPING																			OPTIONAL ACCESSORIES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
TOWER MODEL		BX						HBX						HDBX						EX						EF-BX						EX-R1						BX-SM						BX-HC-78						BX-HC-36						BX-CHK*						BX-CA6						BX-CA5						BX-CA4						BX-CA3						BXB-8						BXB-7						BXB-6						BXB-5						BXB-4						BXB-3						EX-H2						EX-H1						EXDR-1						EX-B1						M-8						FL						BX-8						BX-7						BX-6						BX-5						BX-4						BX-3A						BX-3						BXS-2						BX-2A						BX-2						BXS-1						BX-1A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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NOTE: Be sure you select type of base and ORDER SEPARATELY for BX, HBX, and HDBX Towers.  
For EX Tower your base is included, unless you desire Roof Mount which must be ordered separately.

... .. with PV hardware

# MODEL BX TOWER DESIGN ASSUMPTIONS

## TOWER MATERIAL SPECIFICATIONS:

LEGS: ASTM A-446 GRADE C STEEL (MINIMUM YIELD POINT - 45,000 PSI)  
(GALVANIZED ACCORDING TO ASTM A-525)

BRACES: COLD ROLLED C-1017 STEEL (MINIMUM YIELD POINT - 36,000 PSI)  
(GALVANIZED ACCORDING TO ASTM A-525)

LEG SPLICE BOLTS: SAE GRADE 5 STEEL

RIVETS: 2017-T4 ALUMINUM ALLOY

## TOWER MEMBER ALLOWABLE DESIGN STRESSES:

NOTE: ALLOWABLE STRESSES BELOW HAVE BEEN INCREASED  
BY  $33\frac{1}{3}\%$  FOR THE WIND LOAD CONDITION.<sup>①</sup>

### LEGS:

COMPRESSION—(STRESS VARIES ACCORDING TO SLENDERNESS RATIO)<sup>②</sup>

BEARING—126,000 PSI<sup>③</sup>

SHEAR—24,000 PSI<sup>④</sup>

### BRACES:

COMPRESSION—(STRESS VARIES ACCORDING TO SLENDERNESS RATIO)<sup>②</sup>

BEARING—100,800 PSI<sup>③</sup>

SHEAR—19,330 PSI<sup>④</sup>

### BOLTS:

SHEAR—29,300 PSI (THREADS EXCLUDED FROM SHEAR PLANE)<sup>⑤</sup>

### RIVETS:

SHEAR—18,120 PSI<sup>⑥</sup>

BEARING—53,400 PSI<sup>⑥</sup>

① PAR. 3.1.2.1 OF A.I.S.I. "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", 1968 EDITION.

② A.I.S.C. MANUAL OF STEEL CONSTRUCTION, 7<sup>TH</sup> EDITION, PGS. 5.84 & 5.86.

③ PAR. 4.5.3 OF A.I.S.I. SPECIFICATIONS, 1968 EDITION.

④ A.I.S.C. MANUAL OF STEEL CONSTRUCTION, 7<sup>TH</sup> EDITION, PG. 5.64.

⑤ PAR. 4.5.4 OF A.I.S.I. SPECIFICATIONS, 1968 EDITION.

⑥ ALUMINUM CONSTRUCTION MANUAL, "SPECIFICATIONS FOR ALUMINUM STRUCTURES", 1967 EDITION.

## TOWER SHAPE FACTORS:

### INDIVIDUAL MEMBERS (LEGS, BRACES, TRANSMISSION LINES)

SHAPE FACTOR: 1.00 FOR FLAT ELEMENTS

.67 FOR CYLINDRICAL ELEMENTS

### TOWER SECTION:

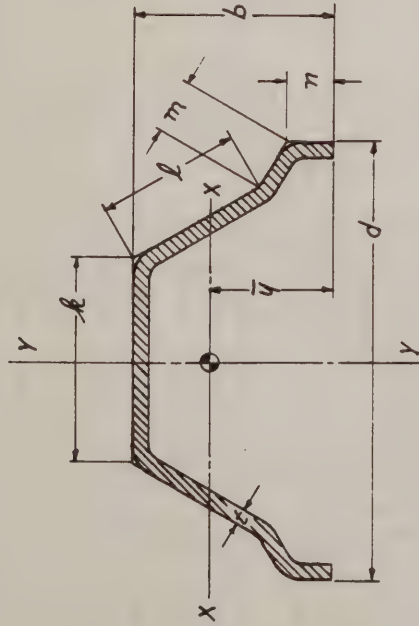
SHAPE FACTOR: 1.50 TIMES THE PROJECTED AREA OF  
INDIVIDUAL MEMBERS IN ONE FACE.



# MODEL BX TOWER SECTION PROPERTIES

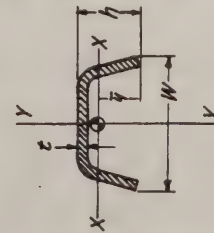
SECTION PROPERTIES OF VERTICAL ELEMENTS

SECT.	t	b	d	k	l	m	n	AREA,	$\bar{y}$	$I_x$	$r_x$	$I_y$	$r_y$
IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN. <sup>2</sup>	IN.	IN. <sup>4</sup>	IN.	IN. <sup>4</sup>	IN.
BX-1	.048	1.1742	2.0984	.7500	1.0134	.1934	.1999	.1637	.6890	.0236	.380	.0746	.675
BX-2	.048	1.1887	2.2145	.8286	1.0198	.2114	.1999	.1698	.7052	.0256	.388	.0862	.712
BX-3	.060	1.2151	2.3544	.9210	1.0298	.2330	.2068	.2228	.7233	.0346	.394	.1260	.752
BX-4	.085	1.2596	2.5441	1.0422	1.0476	.2623	.2212	.3296	.7811	.0548	.408	.2156	.809
BX-5	.1008	1.3058	2.7661	1.1818	1.0704	.2967	.2305	.4151	.7863	.0742	.423	.3172	.874
BX-6	.1008	1.3428	2.9881	1.3214	1.0932	.3311	.2305	.4407	.8160	.0838	.436	.3926	.944
BX-7	.1158	1.3946	3.2399	1.4784	1.1206	.3700	.2391	.5384	.8522	.1106	.453	.5594	1.019
BX-8	.1158	1.5780	3.4916	1.6354	1.1480	.4089	.3794	.6043	.9769	.1540	.505	.7810	1.137



SECTION PROPERTIES OF DIAGONAL ELEMENTS

SECT.	t	h	W	AREA,	$\bar{y}$	$I_x$	$r_x$	$I_y$	$r_y$
IN.	IN.	IN.	IN.	IN. <sup>2</sup>	IN.	IN. <sup>4</sup>	IN.	IN. <sup>4</sup>	IN.
BX-1	.048	.35	.75	.054	.235	.00620	.107	.00330	.247
BX-2	.048	.35	.75	.054	.235	.00620	.107	.00330	.247
BX-3	.048	.35	.75	.054	.235	.00620	.107	.00330	.247
BX-4	.060	.35	.75	.0675	.228	.00732	.104	.00394	.242
BX-5	.075	.46	1.05	.1125	.307	.002164	.139	.01342	.345
BX-6	.075	.46	1.05	.1125	.307	.002164	.139	.01342	.345
BX-7	.075	.46	1.05	.1125	.307	.002164	.139	.01342	.345
BX-8	.075	.46	1.05	.1125	.307	.002164	.139	.01342	.345



SECTION PROPERTIES OF TOWER

SECT. (3 LEGS)	AREA	A	B	C	D	E	$I_x$	$r_x$	WEIGHT,
IN. <sup>2</sup>	IN.	IN.	IN.	IN.	IN.	IN.	IN. <sup>4</sup>	IN.	LB.
BX-1	.491	9.53	8.25	5.99	2.75	5.50	7.50	3.91	22
BX-2	.509	11.86	10.27	7.33	3.42	6.85	12.03	4.86	23
BX-3	.668	14.20	12.30	8.69	4.10	8.20	22.58	5.81	28
BX-4	.989	16.58	14.35	10.08	4.78	9.57	45.44	6.78	41
BX-5	1.245	19.23	16.65	11.62	5.55	11.10	76.94	7.86	59
BX-6	1.322	21.89	18.96	13.16	6.32	12.64	105.9	8.95	64
BX-7	1.615	24.56	21.27	14.72	7.09	14.18	162.7	10.04	75
BX-8	1.813	27.41	23.73	16.42	7.91	15.82	227.4	11.20	82

# MODEL BX TOWER DESIGN DATA

SECT.	PROJECTED AREAS							WIND LOAD PER SECT., LBS.			ALLOWABLE LOADS AT VERTICAL LEG SPICES				ALLOWABLE LOADS AT DIAGONAL CONNECTIONS					
	VERTICAL LEGS				DIAGONALS			TOTALS			AT WIND PRESSURE OF				THICK. OF RIVET DIA., IN.	AREA IN. <sup>2</sup>		ALLOW. LOAD, LBS.		
	EXP. WIDTH (1 LEG) IN.	LENGTH IN.	EXP. AREA (1 LEG) FT. <sup>2</sup>	EXP. AREA (1 FACE) FT. <sup>2</sup>	WIDTH IN.	TOTAL EXP. LENGTH (1 FACE) IN.	TOTAL EXP. AREA (1 FACE) FT. <sup>2</sup>	TOTAL EXPOSED SECTION AREA FT. <sup>2</sup>	AT WIND PRESSURE OF			SPICE BOLTS		THICK. OF LEG, IN.		ALLOWABLE TENSILE LEG SPICE CAPACITY LBS.				
									10 PSF	15 PSF	20 PSF	No.	DIA.							
BX-1	1.73	96	1.15	2.30	.75	173.4	.90	3.20	4.800	48.0	72.0	96.0	2	$\frac{3}{8}$	.048	5630	.0075	.0192	400	348
BX-2	1.79	96	1.19	2.38	.75	190.5	.99	3.37	5.035	50.6	75.8	101.1	2	$\frac{3}{8}$	.048	5810	.0075	.0192	400	348
BX-3	1.87	96	1.25	2.50	.75	209.2	1.09	3.59	5.385	53.9	80.8	107.7	2	$\frac{9}{16}$	.060	7320	.0075	.0192	400	348
BX-4	1.99	96	1.33	2.66	.75	229.0	1.19	3.85	5.775	57.8	86.6	115.5	2	$\frac{9}{16}$	.085	10,910	.0112	.0276	598	500
BX-5	2.12	96	1.41	2.82	1.05	251.6	1.83	4.65	6.975	69.8	104.6	139.5	2	$\frac{9}{16}$	.1008	13,870	.0187	.0491	1000	890
BX-6	2.24	96	1.49	2.98	1.05	276.6	2.02	5.00	7.500	75.0	112.5	150.0	2	$\frac{9}{16}$	.1008	14,880	.0187	.0491	1000	890
BX-7	2.39	96	1.59	3.18	1.05	303.8	2.21	5.39	8.085	80.9	121.3	161.7	3	$\frac{9}{16}$	.1158	18,340	.0187	.0491	1000	890
BX-8	2.65	96	1.77	3.54	1.05	335.6	2.45	5.99	8.985	89.9	134.8	179.7	3	$\frac{9}{16}$	.1158	20,910	.0187	.0491	1000	890

ALLOWABLE COMPRESSIVE LOADS														
SECT.	VERTICAL LEGS							DIAGONAL BRACES						
	L <sub>V</sub> IN.	T <sub>V</sub> IN.	L <sub>V</sub> T <sub>V</sub>	F <sub>a</sub> PSI	CROSS- SECT. AREA (1 LEG) IN. <sup>2</sup>	ALLOWABLE LEG LOAD, LBS.	L <sub>D</sub> IN.	T <sub>D</sub> IN.	L <sub>D</sub> T <sub>D</sub> *	F <sub>a</sub> PSI	F <sub>a</sub> PSI	CROSS- SECT. AREA IN. <sup>2</sup>	ALLOWABLE BRACE LOAD, LBS.	
BX-1	12 1/2	.380	32.9	24,300	32,400	.1637	5300	15.34	.107	71.7	16,250	21,660	.054	1170
BX-2	12 1/2	.388	32.2	24,380	32,500	.1698	5520	16.78	.107	78.4	15,540	20,720	.054	1120
BX-3	12 1/2	.394	31.7	24,430	32,570	.2228	7260	18.41	.107	86.0	14,670	19,560	.054	1060
BX-4	12 1/2	.408	30.6	24,540	32,710	.3296	10,780	20.16	.104	96.9	13,360	17,810	.0675	1200
BX-5	12 1/2	.423	29.6	24,650	32,870	.4151	13,640	22.22	.139	79.9	15,370	20,490	.1125	2310
BX-6	12 1/2	.436	28.7	24,740	32,990	.4407	14,540	24.41	.139	87.8	14,560	19,410	.1125	2180
BX-7	12 1/2	.453	27.6	24,850	33,130	.5184	17,840	26.66	.139	95.9	13,490	17,990	.1125	2020
BX-8	12 1/2	.505	24.8	25,130	33,510	.6043	20,250	29.19	.139	105.0	12,330	16,440	.1125	1850

$$*L_D' = \frac{1}{2} L_D$$



ROHN

MAST ASSEMBLY

BX - STANDARD // HBX - HEAVY DUTY // HDBX - EXTRA HEAVY DUTY TOWERS

1. Two U-bolt assemblies with "L" brackets are supplied for installing the mast. These "L" brackets are bolted through the slotted holes on the rotor and top plate with the short legs of the "L" bracket toward the outside of the tower.  
See Drawing C-750429.
2. Run the U-bolt through the open side of the formed "V" clamp and into the "L" bracket placing the 5/16" nuts and washers on the U-bolt loosely.
3. To install the mast, place one end of it through the upper U-bolt assembly end plate and slide it down into the lower U-bolt assembly. Then tighten the U-bolt assembly to hold the mast.
4. Adjustments to make the mast vertical may be made by moving the "L" brackets in the slotted holes.

The HBX - Heavy Duty and HDBX - Extra Heavy Duty Towers are furnished with a mast clamp installed on the top plate made from a pipe floor flange, which is provided with three bolts to be used as set screws to secure the mast. The box of hardware consists of one U-bolt assembly as described above and it can be installed on the lower plate as is instructed above, if required.

ASSEMBLY INSTRUCTIONS

BREAKING DOWN BUNDLE

1. If your tower includes the 8' mast and/or three 4' base stubs, remove them. Remove the package of nuts, bolts, and washers.
2. Lay the bundle on its side and remove the tower sections. Start with the innermost section of the package (the smallest section) and remove by pulling out with quick, firm jerks. It is not necessary nor desirable to pry the tower sections out with tools as damage may result.
3. Inspect all tower sections on delivery to make sure there are no loose or broken rivets caused by transport mishandling. If a rivet is broken or loose, it should be replaced by a snug-fitting machine bolt and nut, securely tightened.

TOWER

After you have chosen the desired type of base for your tower (concrete base with BXB concrete base stubs, BXHC hinged concrete base, or BXCA cylinder base which hinges over and requires no concrete) and it is properly installed per base instructions, bolt the base section (the largest section) to the base. Proceed with the erection as follows:

1. The legs on each higher section slide inside the previous one and should be positioned on the rivet stop in the previous leg. (This rivet stop is to prevent the tower section being installed from slipping through the previous section and is not for the purpose of aligning the assembly holes.) (Special Note: The BX8 section does not have a rivet stop in it, so extreme caution should be used when installing the BX7 section into the BX8 section.) Proceed by bolting together each section with the proper size bolts.
2. To erect the tower, section by section vertically, you should use an EFBX erection fixture for raising and locating the section being installed into the previous section. (Note: Do not use an erection fixture to lift more than the weight of one tower section at a time.) By using BXHC or BXCA base the tower can be assembled on the ground and hinged up using extreme caution. When hinging up, watch for power lines, trees, etc.
3. Loose, missing or faulty rivets should be replaced with a similar size nut and bolt which can be obtained at any local hardware store.

NOTE: 3/8" bolts are to be used on BX1, BX2 and the top of BX3 sections. 9/16" bolts are used on the bottom of the BX3 and all sections from BX4 through BX8 (BX8 is the largest section).

One set of cross braces on one face of the top section is purposely left off to allow easy access to the rotor plate for installing the mast and rotor. (Note: Only one person should be on the tower at one time.)

**CAUTION ...** Be sure hinge bolts on hinged type accessories are loosened before attempting to hinge tower over. All hinged type bases are recommended to be used to raise tower only without antenna. When raising and lowering tower on any hinged type base, the loads applied for hinging the tower must be applied equally on both sides of the tower in order to reduce the possibility of twist on tower and hinges at the base. Special care must be taken to avoid the use of raising and lowering methods which may cause damage to tower or hinges. Hinged bases should only be installed and dismantled by professional and experienced installers.

NOTES ON INSTALLING ROTATORS

Most all makes of rotators can be installed on the rotor plate inside the top tower section of the BX standard towers. There is a short piece of tubing furnished with each tower that can be used as a thrust bearing (for 1-1/4" mast) with the mast clamp installed on the top plate as is described under the heading of Mast Assembly. Do not install rotators on the HDBX top plate.

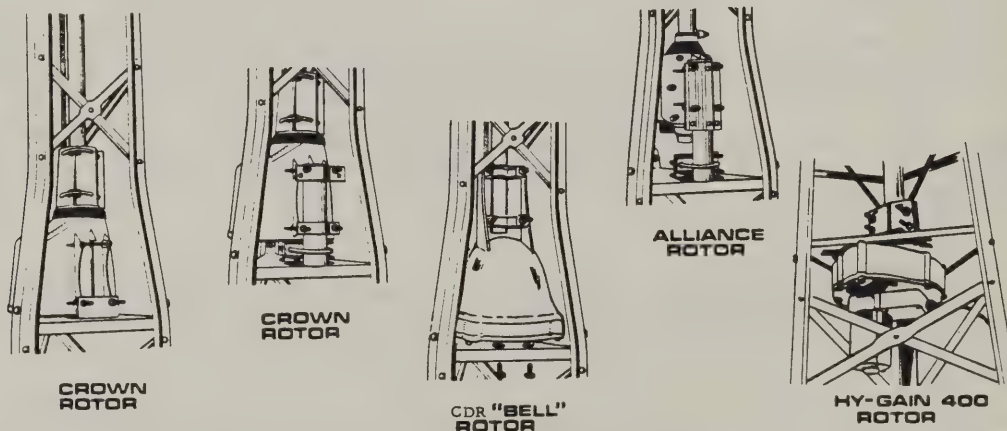
For the HBX - Heavy Duty and HDBX - Extra Heavy Duty Towers, when a rotator is used a 4" piece of tubing or pipe with an I.D. larger than the O.D. of the mast can be installed in the pipe flange clamp and used as a bearing sleeve for the mast to turn in.

FOR INSTALLING THE ROTATOR ITSELF, FOLLOW THE PROCEDURES OUTLINED BELOW:

Some inline model rotators mount directly to the rotor plate. (The lower housing of the rotator is not used when this is done.) The necessary holes for mounting most rotors are pre-punched in the plate itself and the bolts furnished to bolt the lower housing to the upper housing (4-1/4" x 1" bolts) are to be inserted from the bottom of the plate upward and into the rotor. It is desirable to place 3/8" nuts to act as spacers between the rotor plate and the rotator.

These nuts will prevent the terminals of the rotator and the rotor wire from shorting on the rotor plate. An 8" piece of tubing is furnished with each tower. It can be installed into the clamp ("V" clamp and "L" shaped brackets furnished for offset rotor installation only) for the offset type rotors. It is necessary to reverse the clamp assembly (to face outside of the tower), opposite that of installing a standard mast to the rotor plate. Some rotators can be mounted directly to the "L" shaped bracket as shown or to the 8' mast as previously described.

Also, some rotators mount beneath the rotor plate (as pictured). It will be necessary to increase the 1/4" holes in the rotor plate to 3/8" holes to use the 3/8" bolts furnished with these rotators. See pictorial views of typical rotor installations:



In all cases be careful during installation.

\*\*\*\*\*

NOTES .....

Do not install towers near power lines. All towers should be installed out of falling distance of power lines since every electrical and telephone wire should be considered dangerous.

Rohn recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers. Only one person should be on the tower at a time.

All antenna installations must be grounded per local or national codes.

All towers should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel at least twice a year and remarked with hazard and warning labels to insure safety and proper performance.



# STRESSES IN VERTICAL MEMBERS

THE LONGITUDINAL STRESS IN THE VERTICAL MEMBERS ATTAINS ITS CRITICAL MAGNITUDE WHEN THE WIND IS NORMAL TO THE WINDWARD FACE OF THE TOWER AND A SINGLE MEMBER IS IN THE POSITION OF THE COMPRESSION CHORD. IN THIS CASE, THE SINGLE COMPRESSION VERTICAL IS THE CRITICAL MEMBER.

THE LONGITUDINAL STRESS IN THE CRITICAL VERTICAL MEMBER MAY BE TAKEN AS

$$f = \frac{1}{A} \left( \frac{12M}{d} + \frac{P}{3} \right)$$

WHERE

- A = CROSS-SECTIONAL AREA OF ONE VERTICAL, IN.<sup>2</sup>
- M = BENDING MOMENT DUE TO WIND ON TOWER, ANTENNA, AND COAXIAL LINE, FT.-LBS.
- d = ALTITUDE OF TOWER TRIANGLE, IN. (SEE DIMENSION B ON CHART SHOWING CROSS-SECTION OF TOWER).
- P = AXIAL LOAD, LBS.

THESE STRESSES ARE COMPUTED FOR THE BASE OF EACH TOWER SECTION IN THE FOLLOWING TABLE. THE AXIAL LOAD, P, INCLUDES THE WEIGHT OF ALL SECTIONS ABOVE THE CROSS-SECTION IN QUESTION, PLUS AN ALLOWANCE OF 50 LBS. FOR THE WEIGHT OF THE ANTENNA AND ACCESSORIES, PLUS THE WEIGHT OF THE COAXIAL LINE. THE TABLE BELOW IS BASED UPON A WIND PRESSURE OF 15 LBS. PER SQ. FT.

STRESSES IN VERTICALS (AT BASE OF SECTION)									
SECTION	AREA, (1 LEG) IN. <sup>2</sup>	d, IN.	P, LBS.	M, FT.-LBS.	$\frac{P}{3}$ LBS.	$\frac{12M}{d}$ LBS.	$\frac{P + 12M}{3}$ LBS.	f, PSI	ALLOW. F, PSI
AX-1	.1320	8.35	74	624	25	897	922	6780	25,130
AX-2	.1380	10.51	95	1543	32	1762	1794	13,000	25,510
AX-3	.1800	12.48	121	2949	40	2836	2876	15,980	25,400
AX-4	.2391	14.37	154	4871	51	4062	4113	17,200	25,680
AX-5	.2531	16.52	198	7384	66	5364	5430	21,450	25,920
AX-6	.2672	18.75	245	10,577	82	6769	6851	25,640	26,280
AX-7	.4462	20.83	310	14,525	103	8368	8471	19,980	26,790
AX-8	.4725	23.47	382	19,520	127	9980	10,107	21,990	26,810

\* ANTENNA AREA ASSUMED AS 2 SQ. FT.

# STRESSES IN DIAGONAL MEMBERS

THE STRESSES IN THE DIAGONAL BRACES ARE DUE TO THE SHEAR FORCE ON THE TOWER. IN REFERRING TO FIG. 1 IN THE NEXT COLUMN IT CAN BE SEEN THAT THE SHEAR IN EACH OF THE OBLIQUE FACES OF THE TOWER MAY BE TAKEN AS

$$S = \frac{H}{2 \cos 30^\circ} = .577 H$$

WHERE H IS THE TOTAL HORIZONTAL SHEAR ON THE TOWER AT THE SECTION UNDER CONSIDERATION.

SINCE THE X-BRACES ARE SPACED VERTICALLY AT 18.75 INCHES (SEE FIG. 2), THE VERTICAL COMPONENT OF THE FORCE (FIG. 3) CARRIED BY A PAIR OF DIAGONALS IS

$$V = S (\tan \theta) = S \left( \frac{18.75}{D} \right)$$

BUT  $S = .577 H$

(CONTINUED)

# STRESSES IN DIAGONAL MEMBERS (CONTD.)

$\therefore V = .577 H \left( \frac{18.75}{D} \right) = 10.82 \left( \frac{H}{D} \right)$

THE AXIAL LOAD, Q, IN EACH DIAGONAL CAN THEN BE DETERMINED AS FOLLOWS:

$$\frac{Q}{L} = \frac{V}{L \cos 30^\circ} \text{ ; OR } Q = \frac{V(L)}{.866}$$

SUBSTITUTING VALUE OF V FROM ABOVE,

$$Q = \frac{10.82 \left( \frac{H}{D} \right) L}{.866} = \frac{.8H(L)}{D}$$

THE AXIAL STRESS IN EACH DIAGONAL IS THEN GIVEN BY  $f = \frac{Q}{A}$ .

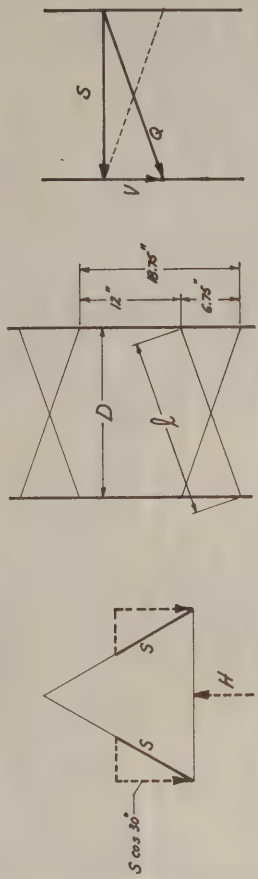


FIG. 1

FIG. 2

FIG. 3

THE AXIAL LOADS AND STRESSES IN THE DIAGONALS AT THE LOWER ENDS OF THE RESPECTIVE SECTIONS ARE COMPUTED IN THE FOLLOWING TABLE. THESE VALUES ARE BASED UPON A WIND PRESSURE OF 15 LBS. PER SQ. FT. AND AN ASSUMED ANTENNA AREA OF 2 SQ. FT.

STRESSES IN DIAGONALS							
SECTION	L, IN.	D, IN.	AREA, IN. <sup>2</sup>	H, LBS.	Q, LBS.	f, PSI	ALLOW. F, PSI
AX-1	11.6	9.3	.054	89	89	1650	23,960
AX-2	14.4	12.6	.054	151	138	2560	22,280
AX-3	15.2	13.8	.054	216	190	3520	21,770
AX-4	17.2	15.9	.0675	286	248	3670	20,070
AX-5	19.4	18.1	.1125	370	317	2820	21,930
AX-6	22.0	20.8	.1125	462	391	3480	20,610
AX-7	24.0	23.9	.1125	568	448	4160	19,520
AX-8	27.4	26.5	.1125	681	563	5010	17,530

FROM THE FOREGOING CALCULATIONS IT IS SEEN THAT THE ACTUAL STRESSES IN THE VERTICALS AND THE DIAGONALS DUE TO THE DEAD WEIGHTS AND THE SPECIFIED INTENSITY OF WIND PRESSURE (15 PSF) ARE LESS THAN THE ALLOWABLE STRESSES.

SPAULDING AX-TYPE TOWER

LOADS AT VERTICAL SPICES

THE VERTICALS ARE SPICED BY SAE GRADE 5 HIGH STRENGTH STEEL BOLTS OF THE SIZES AND NUMBERS INDICATED. THE SHEAR AND BEARING STRENGTHS ARE BASED UPON BASIC ALLOWABLE STRESSES OF 22,000 PSI AND 3.5 TIMES THE ALLOWABLE COMPRESSIVE STRESS FOR MATERIAL HAVING A YIELD STRENGTH OF 36,000 PSI (SEE A.I.S.I. CODE) RESPECTIVELY. THESE ALLOWABLE STRESSES ARE INCREASED BY 33% FORBUT FOR THE WIND LOAD CONDITION. THE THICKNESS OF THE MEMBER IS LIMITED BY  $t$  IN THE FOLLOWING TABLE. FOR THIS TABLE AND THE ONE BELOW, THE WIND PRESSURE HAS BEEN TAKEN AS 15 PSF AND THE ANTENNA AS HAVING A PROJECTED AREA OF 2 SQ. FT.

SECTION	BOLTS NO.	DIA., IN.	$t$ , IN.	AREA(SPLICED), IN. <sup>2</sup>		ALLOW. LOAD, LBS.	
				BEARING	SHEAR	BEARING	SHEAR
AX-1	2	$\frac{1}{4}$	.048	.024	.098	2440	2870
AX-2	2	$\frac{1}{4}$	.048	.024	.098	2440	2870
AX-3	2	$\frac{1}{2}$	.060	.060	.392	6110	11,500
AX-4	2	$\frac{1}{2}$	.075	.075	.392	7630	11,500
AX-5	2	$\frac{1}{2}$	.075	.075	.392	7630	11,500
AX-6	2	$\frac{1}{2}$	.075	.075	.392	7630	11,500
AX-7	3	$\frac{1}{2}$	.105	.1575	.589	16,030	17,370
AX-8	3	$\frac{1}{2}$	.105	.1575	.589	16,030	17,370

LOADS AT DIAGONAL CONNECTIONS

THE DIAGONAL BRACES ARE ATTACHED TO THE VERTICALS BY 2017-74 ALUMINUM ALLOY RIVETS HAVING BASIC ALLOWABLE SHEAR AND BEARING STRESSES OF 10,000 PSI AND 21,000 PSI, RESPECTIVELY. THESE ALLOWABLE STRESSES ARE INCREASED BY ONE-THIRD FOR THE WIND LOAD CONDITION. THE ALLOWABLE LOADS AND APPLIED LOADS ON THE ATTACHMENTS OF THE DIAGONALS ARE COMPUTED IN THE FOLLOWING TABLE.  
THE MAXIMUM OF RESULTANT LOAD ON A RIVET, AS SHOWN PREVIOUSLY, IS  $V = 10,814/D$ . THESE VALUES ARE LISTED AS THE APPLIED LOADS IN THE TABLE.

SECTION	RIVET DIA., IN.	$t$ , IN.	AREA, IN. <sup>2</sup>	ALLOW. LOAD, LBS.		APPLIED LOAD, LBS.	
				BEARING	SHEAR	BEARING	SHEAR
AX-1	$\frac{5}{32}$	.048	.0075	.0192	270	256	104
AX-2	$\frac{5}{32}$	.048	.0075	.0192	270	256	130
AX-3	$\frac{5}{32}$	.048	.0075	.0192	270	256	169
AX-4	$\frac{3}{16}$	.060	.0125	.0276	465	368	195
AX-5	$\frac{3}{16}$	.075	.01406	.0276	506	368	221
AX-6	$\frac{3}{16}$	.075	.01406	.0276	506	368	240
AX-7	$\frac{1}{4}$	.075	.01875	.0491	675	655	244
AX-8	$\frac{1}{4}$	.075	.01875	.0491	675	655	270

ALLOWABLE ANTENNA LOADS AT VARIOUS WIND PRESSURES

NOMINAL HEIGHT, FT.	COMBINATION OF TOWER SECTIONS	CATALOG NO. FOR STANDARD ENCLAVED TOWERS	ALLOWABLE ANTENNA LOADS *			
			10 PSF (50 MPH)	15 PSF (61.2 MPH)	20 PSF (70.7 MPH)	20 PSF (70.7 MPH)
8	AX-1		11.9	11.9	7.5	11.2
	AX-2		15.3	15.3	9.7	14.5
	AX-3		35.0	35.0	23.4	35.1
	AX-4		38.8	38.8	37.0	55.5
	AX-5		61.1	61.1	45.4	68.1
	AX-6		84.2	84.2	55.4	83.1
	AX-7		161.0	161.0	106.5	157.7
	AX-8		187.4	187.4	124.1	186.1
16	AX-1-2		7.3	7.3	3.8	5.7
	AX-2-3		15.3	15.3	9.7	14.5
	AX-3-4		32.5	32.5	20.5	30.7
	AX-4-5		40.2	40.2	25.5	38.2
	AX-5-6		49.1	49.1	31.2	46.8
	AX-6-7		84.2	84.2	55.4	83.1
	AX-7-8		113.6	113.6	73.8	110.7
	AX-1-2-3	AX-24	7.3	7.3	3.8	5.7
24	AX-2-3-4		15.3	15.3	9.7	14.5
	AX-3-4-5		26.1	26.1	15.5	23.2
	AX-4-5-6		32.3	32.3	19.4	29.1
	AX-5-6-7		49.1	49.1	31.2	46.8
	AX-6-7-8		78.4	78.4	49.5	74.2
	AX-1-2-3-4	AX-32	7.3	7.3	3.8	5.7
	AX-2-3-4-5	HAX-32	15.3	15.3	9.0	13.5
	AX-3-4-5-6	HDX-32	22.0	22.0	11.9	17.8
32	AX-4-5-6-7		32.3	32.3	19.4	29.1
	AX-5-6-7-8		49.1	49.1	31.2	46.8
	AX-1-2-3-4-5	AX-40	7.3	7.3	3.8	5.7
	AX-2-3-4-5-6	HAX-40	14.8	14.8	6.4	9.6
	AX-3-4-5-6-7	HDX-40	22.0	22.0	11.9	17.8
	AX-4-5-6-7-8		32.3	32.3	19.4	29.1
	AX-1-2-3-4-5-6	AX-48	7.3	7.3	2.3	3.4
	AX-2-3-4-5-6-7	HAX-48	14.8	14.8	6.4	9.6
48	AX-3-4-5-6-7-8	HDX-48	22.0	22.0	11.9	17.8
	AX-1-2-3-4-5-6-7	AX-56	7.3	7.3	2.3	3.4
	AX-2-3-4-5-6-7-8	HAX-56	14.8	14.8	6.4	9.6
	AX-1-2-3-4-5-6-7-8	AX-64	7.3	7.3	2.3	3.4
	AX-2-3-4-5-6-7-8		14.8	14.8	6.4	9.6
	AX-3-4-5-6-7-8		22.0	22.0	11.9	17.8
	AX-4-5-6-7-8		32.3	32.3	19.4	29.1
	AX-1-2-3-4-5-6-7-8		7.3	7.3	2.3	3.4
56	AX-2-3-4-5-6-7-8		14.8	14.8	6.4	9.6
	AX-3-4-5-6-7-8		22.0	22.0	11.9	17.8
	AX-4-5-6-7-8		32.3	32.3	19.4	29.1
	AX-1-2-3-4-5-6-7-8		7.3	7.3	2.3	3.4
	AX-2-3-4-5-6-7-8		14.8	14.8	6.4	9.6
	AX-3-4-5-6-7-8		22.0	22.0	11.9	17.8
	AX-4-5-6-7-8		32.3	32.3	19.4	29.1
	AX-1-2-3-4-5-6-7-8		7.3	7.3	2.3	3.4
64	AX-2-3-4-5-6-7-8		14.8	14.8	6.4	9.6
	AX-3-4-5-6-7-8		22.0	22.0	11.9	17.8
	AX-4-5-6-7-8		32.3	32.3	19.4	29.1
	AX-1-2-3-4-5-6-7-8		7.3	7.3	2.3	3.4
	AX-2-3-4-5-6-7-8		14.8	14.8	6.4	9.6
	AX-3-4-5-6-7-8		22.0	22.0	11.9	17.8
	AX-4-5-6-7-8		32.3	32.3	19.4	29.1
	AX-1-2-3-4-5-6-7-8		7.3	7.3	2.3	3.4

\* THIS LOAD CAN BE APPLIED AT A POINT 5 FT. ABOVE THE BASE OF THE TOWER IN ADDITION TO THE GIVEN WIND PRESSURE ACTING ON THE TOWER.



AX-48 (With Shipping Braces)



AX-48

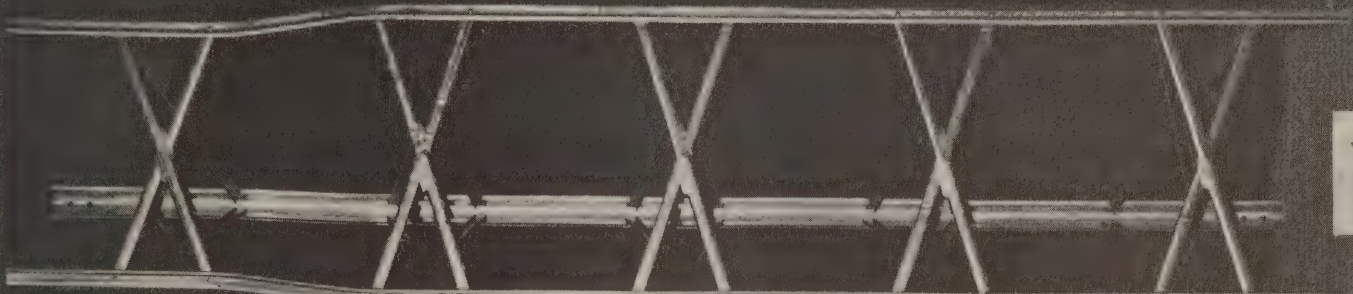
AX-40

AX-32

AX-24



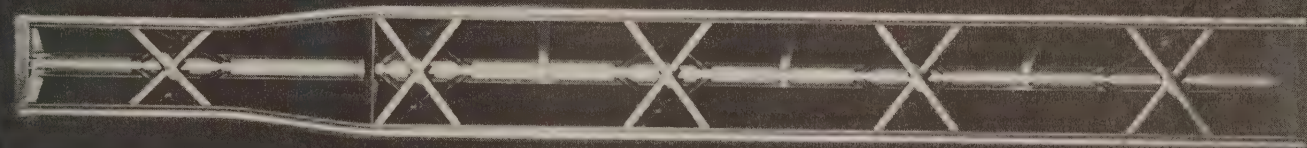




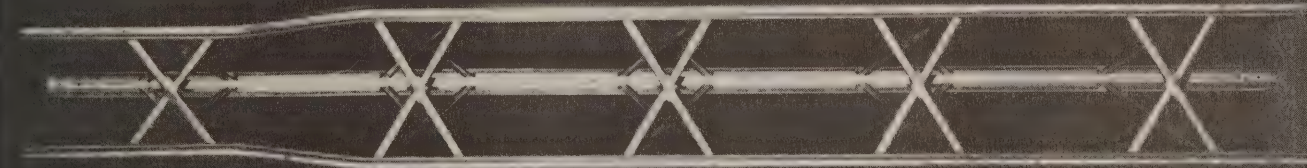
AX-6



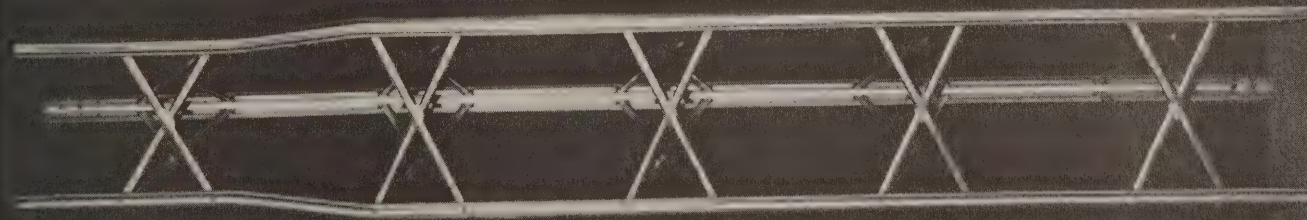
AX-5



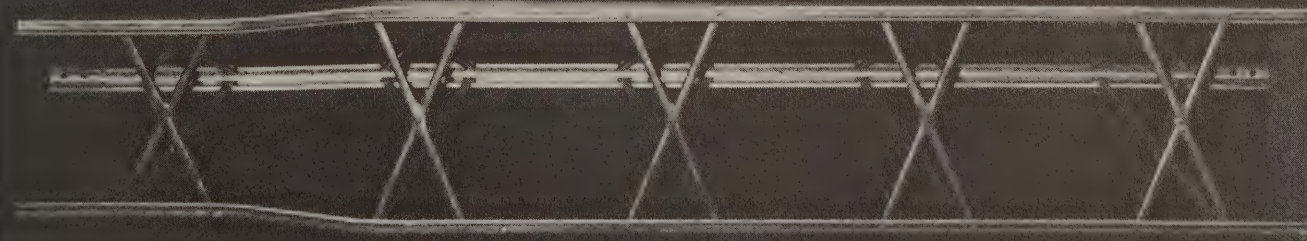
AX-1A



AX-2

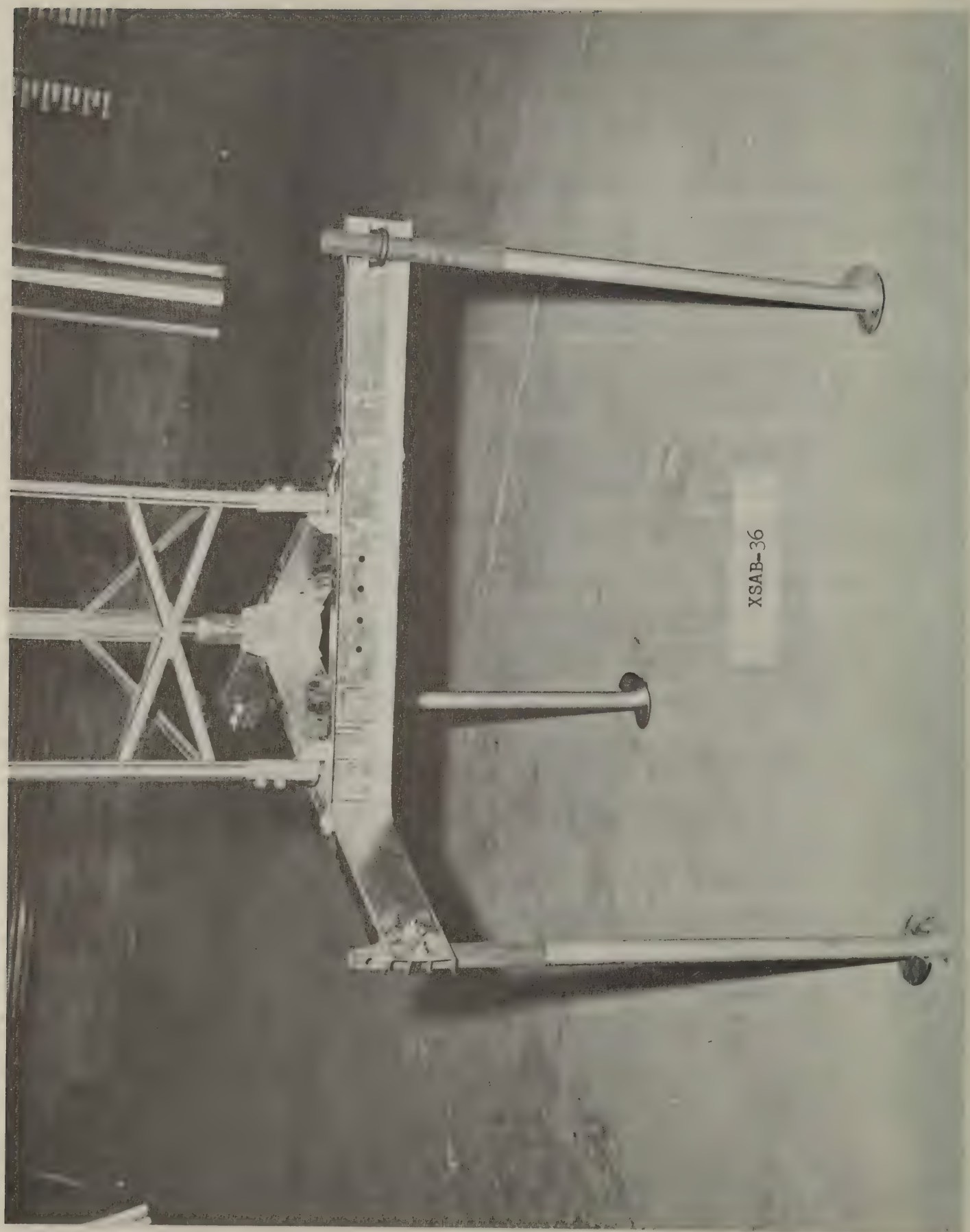


AX-3



AX-4







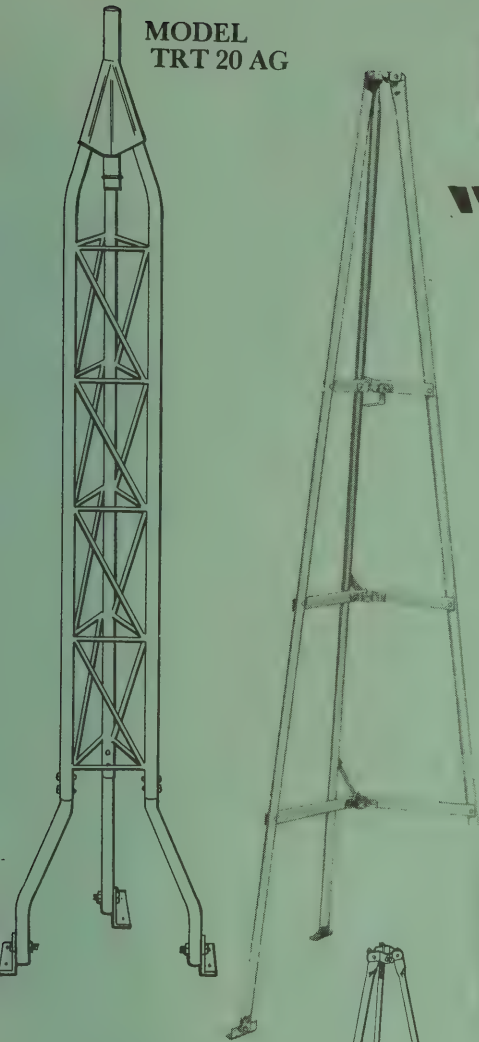


HDX-48



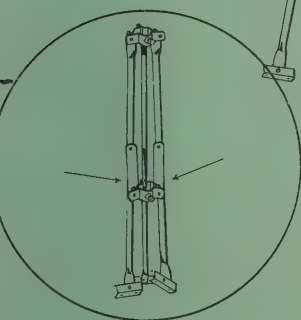


MODEL  
TRT 20 AG

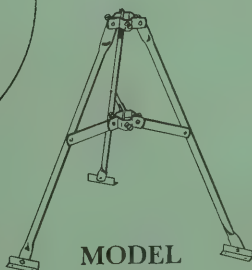


MODEL TRT 112

MODEL TRT 60



NOTE: TRT 112, 60, 36 & 30 fold down as illustrated for shipping and storing.



MODEL  
TRT 36

ROHN

HOT DIPPED  
GALVANIZED

## "TRT" ROOF TOWERS

Rohn snap-open towers cut assembly time by 80%

### MODEL TRT 20 AG

This roof tower consists of a special 9' top section of Rohn No. 20G tower with three 2' legs which are quickly and easily inserted into tower to make a quick, easy installation. Ideal for limited storage space. It's a tower that should always be on hand.

### MODEL TRT 112

Unique bracing design permits easy climbing and has excellent strength. Use either mast or rotor mounting. This design is ideal for inline rotors.

### MODEL TRT 60

This model is a 5' triangular roof tower. Sturdily cross-braced for extra strength.

### MODEL TRT 36

A 3' triangular roof tower that makes an excellent installation because of its sturdiness. Far superior to "ordinary" installations.

### MODEL TRT 30

Similar to above except 2½' in height.



All snap-open models now have the new **SWING AWAY MAST SUPPORT** for quick and easy orientation before locking antenna in position.

### DO THE JOB BETTER

ROHN experience and superior know-how make these rugged, durably-welded steel roof towers far superior to "ordinary" installations. Engineered to give complete and lasting customer satisfaction, Rohn Triangular Towers are quickly, easily and permanently installed. Always an attractive installation.

### FIT EVERY NEED

These attractive roof towers are designed to fit on all types of roofs, and will mount tubular masts of varying lengths to suit the widest possible variety of customer needs.

### SPECIFICATIONS

All towers listed here (except the TRT 30) are designed to fit roofs with rafters 16 inches on center. Installation is simple and easily accomplished by use of lag screws in the base plates. This securely and rigidly anchors the tower to the roof for a permanent type installation and gives trouble free and long-time service. Towers are all assembled and ready to install in a moment.

**ROHN**® MANUFACTURING

DIVISION OF



P.O. BOX 2000 / PEORIA, ILL. 61601

ROHN ROOF TOWERS

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
TRT-30	30" high	8.65	5.20	6
TRT-36	3' high	10.00	6.00	7
TRT-60	5' high	16.15	9.70	10
TRT-112	9'4" high	25.00	15.00	25
TRT-120	10' high (assembled & nested)	29.95	17.95	24
TRT-20AG	11' high	38.95	23.35	30
TRT-BAG	Plastic bag containing: 6 lag screws, 4 twist-on stand-offs, & 3 foot sealers for TRT feet	3.50	2.10	½
TRT-120-KD	10' high (knocked down)		Discontinued	
TRT-120-SF	10' high (with special feet)		Discontinued	
TRT-20E	20" high (one adjustment bolt)		Discontinued	
TRT-30E	30" high (one adjustment bolt)		Discontinued	
SF-TRT	Special feet for TRT-36-60-120		Discontinued	
RP-TRT-120	Rotor post for TRT-120		Discontinued	

GOLD PAINTED

<u>/N/</u> TRT-30G	30" high	9.75	5.85	6
<u>/N/</u> TRT-36G	3' high	10.85	6.50	7
<u>/N/</u> TRT-60G	5' high	17.95	10.75	10

"GOLD" COLORIZED COATING

TRT-30A	30" high		Discontinued	
TRT-36A	3' high		Discontinued	

INDIVIDUALLY BOXED

(With 6 Lag Screws, 4 Twist-on Stand-offs & Foot Sealers)

TRT-30B	30" high	10.35	6.20	8
TRT-36B	3' high	12.00	7.20	9
TRT-60B	5' high	18.35	11.00	12
TRT-30GB	30" high (gold painted)	11.40	6.85	8
TRT-36GB	3' high (gold painted)	12.85	7.70	9
TRT-60GB	5' high (gold painted)	20.20	12.10	12
TRT-30AB	30" high (gold coating)		Discontinued	
TRT-36AB	3' high (gold coating)		Discontinued	
TRT-20EB	20" high (one adjustment bolt)		Discontinued	
TRT-30EB	30" high (one adjustment bolt)		Discontinued	

NOTE: All TRT-120 roof towers must be purchased in multiples of 5.  
All tripod-type roof towers have a swing-away mast support.

/N/ New Item.

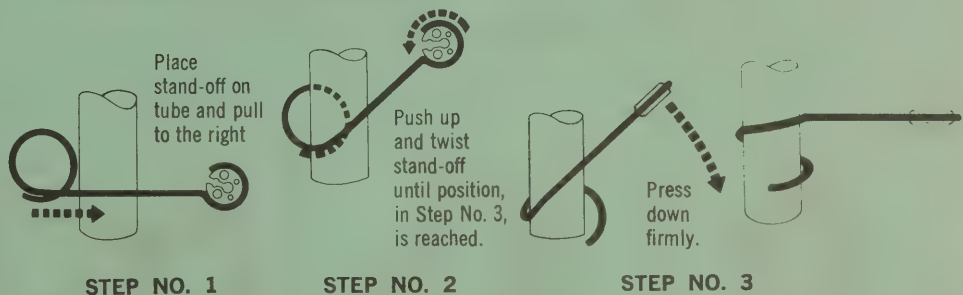




The new ROHN Twist-on Stand-off is simplicity in action. It is installed quickly and simply without the use of any tools.

You have to see the TWIST-ON STAND-OFF in action to appreciate how fast it is installed. In addition to being easily installed, it is also reusable.

#### INSTALLATION PROCEDURE



STEP NO. 1

STEP NO. 2

STEP NO. 3

#### SPECIFICATIONS

- Various lengths
- Available for all popular mast sizes
- Fast split-second installation
- Reusable — inexpensive
- Replaces stainless steel strap & stand-off combination
- Holds the line in tension under all weather conditions
- One piece construction

U. S. PATENT NO. 3,263,026

PART NO.	DESCRIPTION	WEIGHT PER STD. CARTON	STD. CARTON
3TS1-U	3½" for 1" mast (Universal)	4 lbs.	100
3TS1-F	3½" for 1" mast (Flat)	4 lbs.	100
3TS1 ¼-U	3½" for 1¼" mast (Universal)	4½ lbs.	100
3TS1 ¼-F	3½" for 1¼" mast (Flat)	4½ lbs.	100
3TS1 ½-U	3½" for 1½" mast (Universal)	5 lbs.	100
3TS1 ½-F	3½" for 1½" mast (Flat)	5 lbs.	100

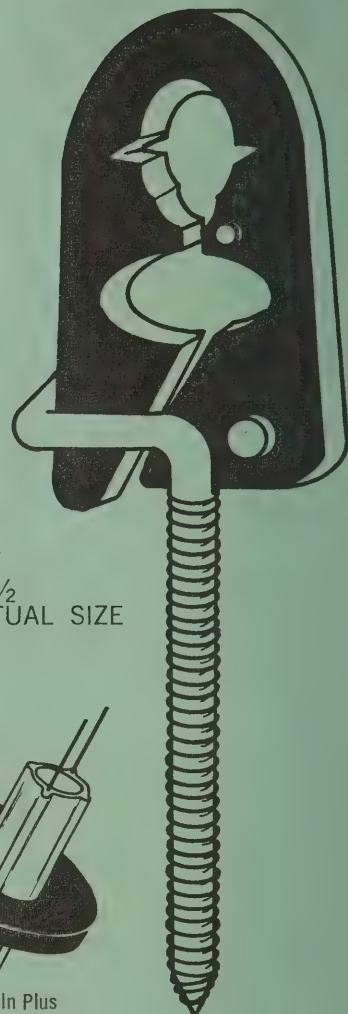
# ROHN®

## NEW E-Z STAND-OFF

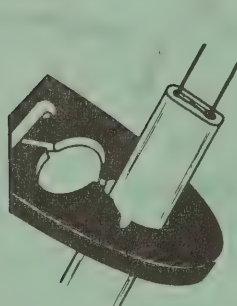
SPECIALLY DESIGNED FOR UHF and VHF TV LEAD-IN WIRE

- Accommodates ROHN wire and others
- Easy to use
- Always stays locked in
- Available in choice of styles
- Fits all new large diameter lines

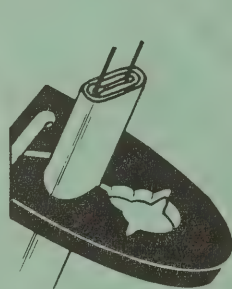
These are Solid Polyethylene Insulators!  
No metal surrounds the wire!



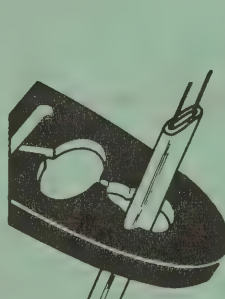
E-Z SWING-IN STAND-OFFS ARE IDEAL FOR ...



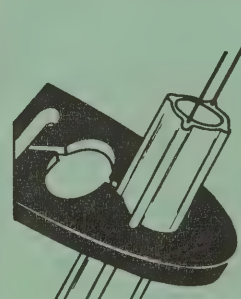
Heavy Duty Shielded  
300 ohm Wire



Standard Heavy Duty  
300 ohm Wire



Heavy Foam-Filled  
Twin-Lead



Round Lead-In Plus  
OVAL & RGU CO-AX  
Any Type of  
Lead-In Wire

**E-Z SWING-IN STAND-OFFS ARE COMPLETELY  
ASSEMBLED READY TO USE!  
MAKE YOUR SELECTION NOW FROM THESE POPULAR TYPES**  
Combination Machine and Wood Screw Type

PART NO.	DESCRIPTION	WEIGHT PER STD. CARTON	STD. CARTON
EZ 3 1/2 WMS	Single Insulator	3 1/4 lbs.	100
EZ 5 1/2 WMS		5 lbs.	100
EZ 7 1/2 WMS		6 1/2 lbs.	100
EZ 7 1/2 WMS-I	Inline Duplex	9 lbs.	100



**ROHN®****STAND-OFFS**

PART NO.

DESCRIPTION

WEIGHT  
PER STD.  
CARTONSTD.  
CARTON**WOOD & MACHINE SCREW COMBO STAND-OFFS**

3½ WMS-F

3½ " Regular Combo

3¼ lbs.

100

3½ WMS-U

3½ " Regular Combo

3¼ lbs.

100

5½ WMS-F

5½ " Regular Combo

4½ lbs.

100

5½ WMS-U

5½ " Regular Combo

4½ lbs.

100

7½ WMS-F

7½ " Regular Combo

6 lbs.

100

7½ WMS-U

7½ " Regular Combo

6 lbs.

100



7½ WMS-IF

7½ " Inline Combo

7 lbs.

100

7½ WMS-IU

7½ " Inline Combo

7 lbs.

100

**WOODSCREW STAND-OFFS**

3½ WS-F

3½ " Woodscrew # 8 Wire

3½ lbs.

100

3½ WS-U

3½ " Woodscrew # 8 Wire

3½ lbs.

100

5½ WS-F

5½ " Woodscrew # 8 Wire

5 lbs.

100

5½ WS-U

5½ " Woodscrew # 8 Wire

5 lbs.

100

7½ WS-F

7½ " Woodscrew # 8 Wire

6 lbs.

100

7½ WS-U

7½ " Woodscrew # 8 Wire

6 lbs.

100



7½ WS-IF

7½ " Inline Woodscrew # 8 Wire

9 lbs.

100

7½ WS-IU

7½ " Inline Woodscrew # 8 Wire

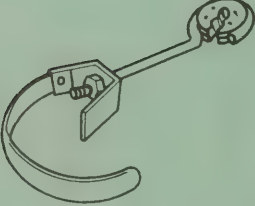
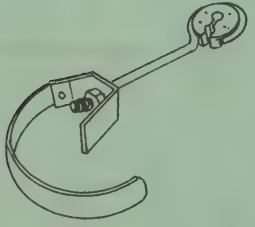
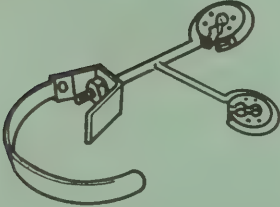

9 lbs.

100

# ROHN®

## SOLID STEEL STAND-OFFS

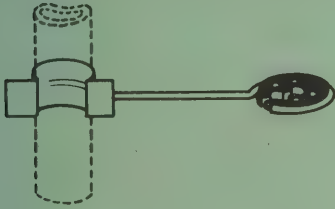
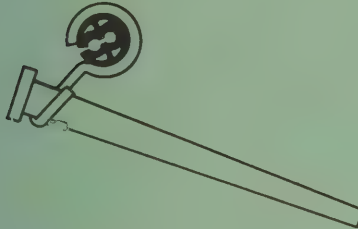
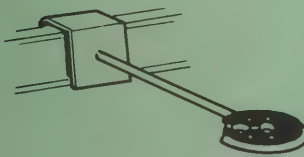

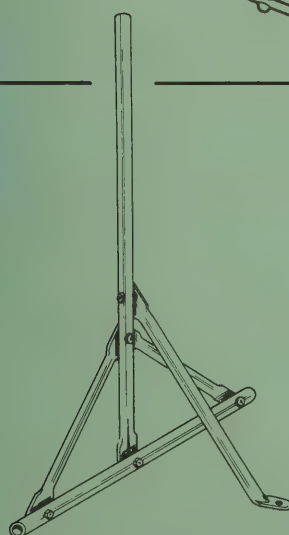
With Strip-proof Machine Threads and 9" Strap

PART NO.	DESCRIPTION	WEIGHT PER STD. CARTON	STD. CARTON
			
<b>GALVANIZED STRAPPING</b>			
3½ MS-F	3½" Single Insulator with Galvanized Strap	9½ lbs.	100
3½ MS-U	3½" Single Insulator with Galvanized Strap	9½ lbs.	100
5½ MS-F	5½" Single Insulator with Galvanized Strap	10½ lbs.	100
5½ MS-U	5½" Single Insulator with Galvanized Strap	10½ lbs.	100
7½ MS-F	7½" Single Insulator with Galvanized Strap	12 lbs.	100
7½ MS-U	7½" Single Insulator with Galvanized Strap	12 lbs.	100
			
<b>STAINLESS STEEL STRAPPING</b>			
3½ MS-SS-F	3½" Single Insulator with Stainless Steel Strap	9½ lbs.	100
3½ MS-SS-U	3½" Single Insulator with Stainless Steel Strap	9½ lbs.	100
5½ MS-SS-F	5½" Single Insulator with Stainless Steel Strap	10½ lbs.	100
5½ MS-SS-U	5½" Single Insulator with Stainless Steel Strap	10½ lbs.	100
7½ MS-SS-F	7½" Single Insulator with Stainless Steel Strap	12 lbs.	100
7½ MS-SS-U	7½" Single Insulator with Stainless Steel Strap	12 lbs.	100
			
<b>INLINE DUPLEX</b>			
7½ MS-IF	7½" Inline Duplex with Galvanized Strap	13½ lbs.	100
7½ MS-IU	7½" Inline Duplex with Galvanized Strap	13½ lbs.	100
7½ MS-SS-IF	7½" Inline Duplex with Stainless Steel Strap	13½ lbs.	100
7½ MS-SS-IU	7½" Inline Duplex with Stainless Steel Strap	13½ lbs.	100
			
<b>COMBINATION WOOD &amp; MACHINE SCREW STRAPPING</b>			
9WM	9" Combo Galvanized Strap with T-Nut	6 lbs.	100
9WM-SS	9" Combo Stainless Steel Strap with T-Nut	6 lbs.	100





## SPECIAL PURPOSE STAND-OFFS AND ACCESSORIES

	PART NO	DESCRIPTION	WEIGHT PER STD. CARTON	STD. CARTON
	<b>SNAP-ON MAST STAND-OFF</b>			
	SOSO-F	For 1 1/4" masts, 3 1/2" long	8 lbs.	100
	SOSO-U	For 1 1/4" masts, 3 1/2" long	8 lbs.	100
	<b>MASONRY DRIVE-IN STAND-OFF</b>			
	MDI-F	Molded of hardened steel with three inch nail. Double welded construction.	6 lbs.	100
	MDI-U	Stand-off with Universal insert	6 lbs.	100
	<b>EAVE CLAMP-ON STAND-OFF</b>			
	GT 3 1/2-F	3 1/2" single eave stand-off	10 1/2 lbs.	100
	GT 3 1/2-U	3 1/2" single eave stand-off	10 1/2 lbs.	100
	<b>NAIL-IN STAND-OFF</b>			
	NIS-F	3 1/2" nail-in type stand-off	4 1/2 lbs.	100
	NIS-U	3 1/2" nail-in type stand-off	4 1/2 lbs.	100
	<b>TRI-ROOF ANTENNA MOUNT</b>			
	TRM-4	Antenna Mount (Bundled)	9 lbs.	1
	TRM-4B	Antenna Mount (Boxed)	10 lbs.	1

# ROHN®

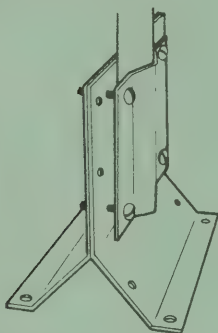
## TV ANTENNA ROOF MOUNTS

PART NO.

DESCRIPTION

WEIGHT  
PER STD.  
CARTON

STD.  
CARTON



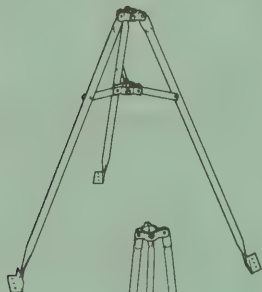
AP 1 1/4

### ROHN ALL-PURPOSE ANTENNA MOUNT

For angle or flat roofs and corners. Will support masts up to 1 1/4" diameter. Mast will mount in two positions. Made of extra heavy gauge steel, zinc plated, and clear chromate dipped — doubly protected against rust.

26 lbs.

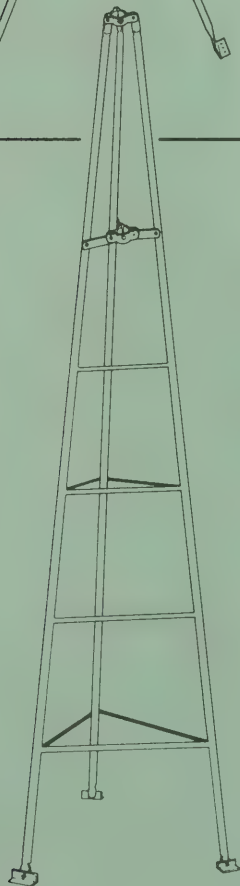
12



### ROOF TOWER

Opens and closes like an umbrella. Completely assembled with solid rivets. Flexible feet fit roof with any slope. Shipped assembled — fast installation.

TRT-30	30" Roof Tower for Mast to 1 1/4"	6 lbs.	1
TRT-36	3 ft. Roof Tower for Mast to 1 1/4"	7 lbs.	1
TRT-60	5 ft. Roof Tower for Mast to 1 1/4"	10 lbs.	1
TRT-30A	30" "Gold" Roof Tower for Mast to 1 1/4"	6 lbs.	1
TRT-36A	3 ft. "Gold" Roof Tower for Mast to 1 1/4"	7 lbs.	1
TRT-20E	20" Roof Tower (one adjustment bolt)	5 lbs.	1
TRT-30E	30" Roof Tower (one adjustment bolt)	6 lbs.	1



Triangular Roof Towers are of welded construction, hot-dipped galvanized. A rigid, durable mounting for all types of TV antennas.

TRT-120	10 ft. welded Roof Tower for Mast to 1 1/4" (Assembled)	120 lbs.	5
TRT-120-KD	10 ft. welded Roof Tower for Mast to 1 1/4" (Knocked down)	24 lbs.	1



# ROHN<sup>®</sup>

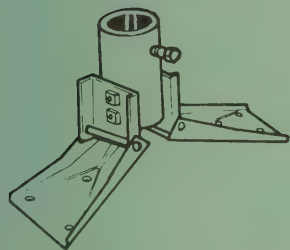
## TV ANTENNA ROOF MOUNTS

PART NO.

DESCRIPTION

WEIGHT  
PER STD.  
CARTON

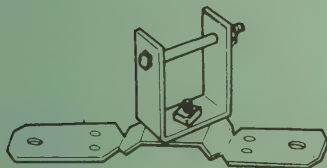
STD.  
CARTON



### RIDGE MOUNT — UNIVERSAL

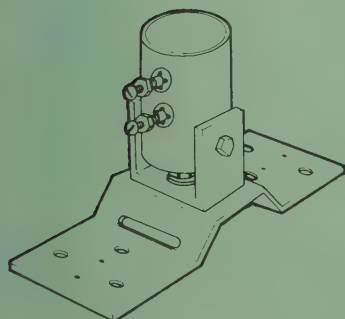
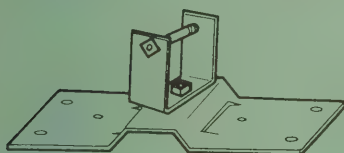
For all types of roof installations — flat roofs, walls or peaked roofs. Completely assembled for quick and easy installation. Allows tall masts to be swung up along the ridge of the roof.

UM20	Holds masts to 1½" dia.	44 lbs.	25
UM30	Holds masts to 1¾" dia.	44 lbs.	25
UM40	Holds masts to 2" dia.	46 lbs.	25
UM50	Holds masts to 2¼" dia.	46 lbs.	25



### ALL-PURPOSE ECONOMY BASE

AP0-Jr.	Holds masts to 2¼" dia.	50 lbs.	50
AP0	Holds masts to 2¼" dia.	37 lbs.	25



### SWIVEL MAST BASE HEAVY DUTY

AP20	Holds masts to 1½" dia.	37 lbs.	25
AP30	Holds masts to 1¾" dia.	37 lbs.	25
AP40	Holds masts to 2" dia.	40 lbs.	25
AP50	Holds masts to 2¼" dia.	40 lbs.	25

# ROHN<sup>®</sup>

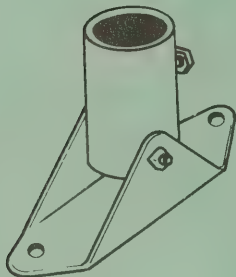
## TV ANTENNA ROOF MOUNTS

PART NO.

DESCRIPTION

WEIGHT  
PER STD.  
CARTON

STD.  
CARTON



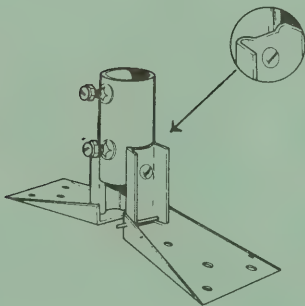
### ECONOMY ANGLE BASE MOUNT

SB125

For masts up to 1 1/4" ONLY. Designed for the small installation job . . . from 5 to 10 ft. Clamp type. Constructed of heavy gauge steel. Completely assembled to save time and save work.

25 lbs.

50



### ROOF MOUNTS

(TMB Series) with "locking" feature.

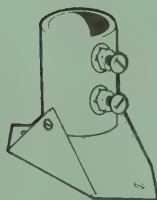
Well designed, carefully made all-purpose roof mounts. Feature "Locking" device which centers and locks the mast into place. Hot-dipped galvanized throughout. Built as a heavy-duty roof mount.

TMB-150  
TMB-200  
TMB-250

Roof mount with locking feature for masts up to 1 1/2"  
Roof mount with locking feature for masts up to 2"  
Roof mount with locking feature for masts up to 2 1/4"

16 lbs.  
17 lbs.  
19 lbs.

12  
12  
12



### ROOF MOUNTS (ETMB Series)

The standard base mount series. Features hot-dipped galvanized finish and heavy duty steel throughout. Part that accommodates mast is especially sturdy for extra strength.

ETMB-150  
ETMB-200  
ETMB-250

Economy roof mount for masts up to 1 1/2"  
Economy roof mount for masts up to 2"  
Economy roof mount for masts up to 2 1/4"

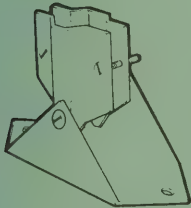
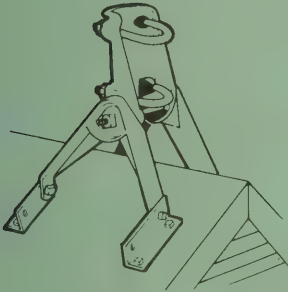
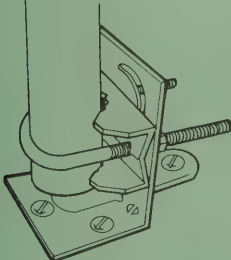
7 lbs.  
12 lbs.  
14 lbs.

12  
12  
12



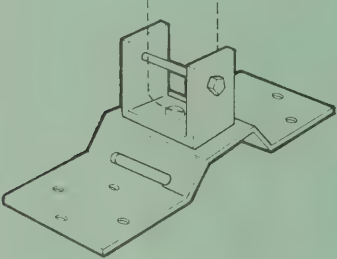
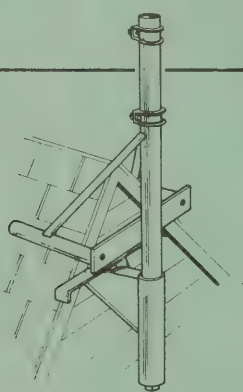
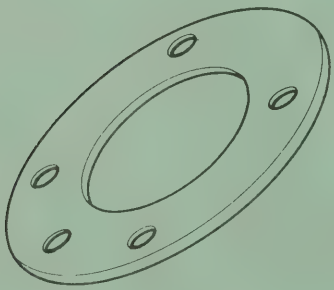
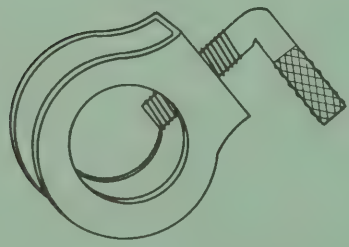


## TV ANTENNA ROOF MOUNTS

PART NO.	DESCRIPTION	WEIGHT PER STD. CARTON	STD. CARTON
	<b>ROOF MOUNT ETMB</b>  ETMB Universal roof mount. Features hot-dipped galvanized finish and heavy duty steel throughout.	12 lbs.	12
	<b>"SELF-LOCKING" ROOF MOUNTS</b>  1AM This specially designed cast aluminum roof mount snaps into place when upright, then securely locks in that position by merely tightening hinge bolt. This feature means that masts can be installed by one man in a matter of seconds.  Universal roof mount with self-locking feature	60 lbs.	24
	<b>HANDY MOUNT</b>  HM-150 An inexpensive mount especially designed for extra solid mounting support through an "extra leg" and reinforcing ribs. Zinc plated, clear chromate dipped for all-weather protection. Pre-assembled, will support masts up to 1½" diameter.	20 lbs.	50

# ROHN<sup>®</sup>

## TV ANTENNA ROOF MOUNTS AND MAST ACCESSORIES

PART NO.	DESCRIPTION	WEIGHT PER STD. CARTON	STD. CARTON
 A technical drawing of a universal mast base. It consists of a flat rectangular base plate with four mounting holes. A vertical U-shaped piece is attached to the center of the base plate. A horizontal slot is cut into the U-shaped piece, and a bolt is shown passing through it, intended to be inserted into a mast.			
<b>UNIVERSAL MAST BASE</b>			
Universal mast base that can be used anywhere! Slip bolt through already drilled hole in all ROHN telescoping masts and fasten to U-piece. Can be rotated and mast can be raised from any angle. Entire base is hot-dipped galvanized for the finest weather protection available.			
2UMB	Universal mount for telescoping masts	28 lbs.	24
 A technical drawing of a gable mount. It shows a vertical mast being inserted into a bracket that is attached to a gable roof. The bracket has a horizontal base and a vertical support that cradles the mast. A bolt is shown passing through the base of the bracket into the roof.			
<b>GABLE MOUNT</b>			
Attaches to any gable roof for a secure, durable antenna mounting. Release bottom bolt, slip into place and retighten bolt. Accommodates tubing up to 1½" in diameter.			
GM-1	Gable mount for masts up to 1½"	13 lbs.	1
 A technical drawing of a galvanized guy ring. It is a circular flange with a central hole and six smaller holes around the perimeter, spaced evenly. The flange has a slightly raised outer rim.			
<b>GALVANIZED GUY RINGS</b>			
Hot-dipped galvanized steel guy rings in a wide variety of sizes for every size mast or any other need. Carefully and accurately made.			
R-2	For 1¼" mast size	15 lbs.	100
R-3	For 1½" mast size	15 lbs.	100
R-4	For 1¾" mast size	15 lbs.	100
R-5	For 2" mast size	15 lbs.	100
R-6	For 2¼" mast size	15 lbs.	100
 A technical drawing of a mast clamp. It is a C-shaped bracket with a threaded rod passing through it. The rod has a knurled handle at one end. The clamp is designed to grip a mast.			
<b>MAST CLAMPS</b>			
Hot-dipped galvanized mast clamps in a wide variety of sizes to fit every mast. Comes complete with L-bolt and nut.			
C-2	For 1¼" mast size	13 lbs.	100
C-3	For 1½" mast size	13 lbs.	100
C-4	For 1¾" mast size	13 lbs.	100
C-5	For 2" mast size	13 lbs.	100
C-6	For 2¼" mast size	13 lbs.	100



# ROHN®

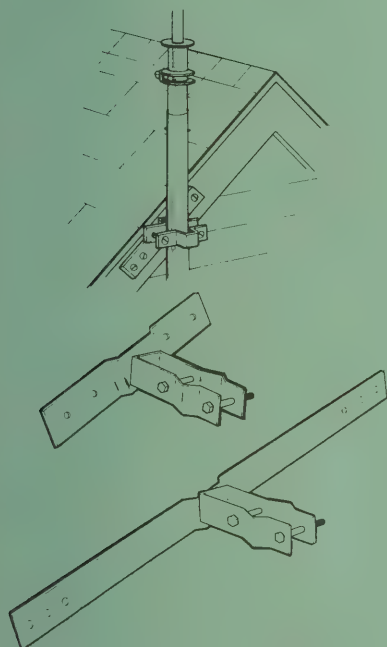
## TELESCOPING MAST BRACKETS AND GROUND MOUNTS

PART NO.

DESCRIPTION

WEIGHT  
PER STD.  
CARTON

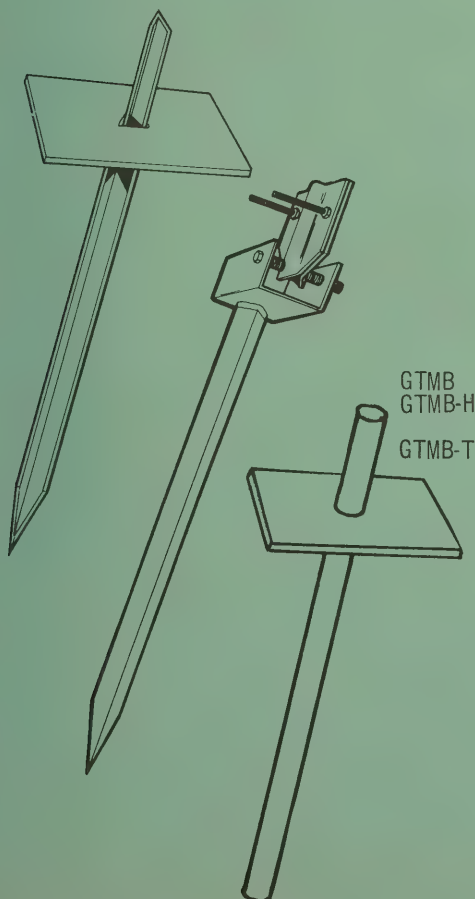
STD.  
CARTON



### MAST BRACKET

Firmly clamps mast along side of building. Quickly and easily installed, swivel construction. Sturdy and long lasting.

TMC	Heavy duty mast bracket, hot-dipped galvanized. Fits mast 1¼" thru 2½" O.D. Holds mast 3" away from mounting surface	3 lbs.	1
TMCS-1	Mast bracket galvanized. Fits masts 1¼" thru 1¾" O.D. Holds mast 3" away from mounting surface	½ lb.	1
TMCS-2	Mast bracket galvanized. Fits masts 1¼" thru 1¾" O.D. Holds mast up to 8" away from mounting surface	1 lb.	1



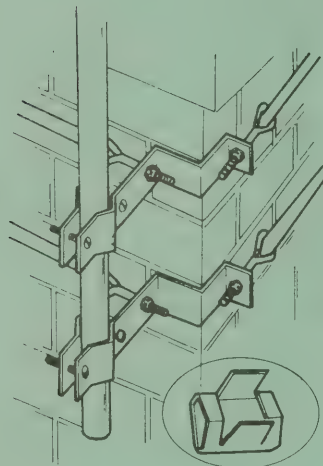
### GROUND MOUNT

Sturdy, drive-in type ground mounts for telescoping masts and tubing.

GTMB	Ground mount for all ROHN telescoping masts and 1¼" tubing.	3 lbs.	1
GTMB-H	Hinged ground mount for all ROHN telescoping masts and 1¼" tubing.	3 lbs.	1
GTMB-T	Ground mount for ROHN telescoping masts made from 1¼" tubing.	3 lbs.	1

# ROHN®

## CHIMNEY MOUNTS



### ROHN QUICK "Z" CHIMNEY MOUNT

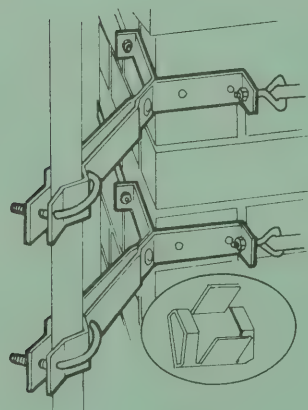
Only one piece to handle. Made of extra heavy gauge steel. Zinc plated and clear chromate dipped for long life. Brackets will support masts up to 1 3/4" diameter. Complete with straps and necessary hardware.

#### GALVANIZED STEEL STRAPPING

Z-10-CM	Mount with 3/4" x 10 ft. Straps	30 lbs.	12
Z-12-CM	Mount with 3/4" x 12 ft. Straps	32 lbs.	12
Z-18-CM	Mount with 3/4" x 18 ft. Straps	39 lbs.	12

#### STAINLESS STEEL STRAPPING

Z-10-CM-SS	Mount with 3/4" x 10 ft. Straps	29 lbs.	12
Z-12-CM-SS	Mount with 3/4" x 12 ft. Straps	30 lbs.	12
Z-18-CM-SS	Mount with 3/4" x 18 ft. Straps	36 lbs.	12



### ROHN ECONOMY SNAP-IN CHIMNEY MOUNT

Fits masts up to 1 3/4" diameter. Extra heavy gauge steel construction. Doubly protected against rust. Zinc plated and clear chromate dipped for long life. Chimney clearance of 4". Simply snap mast in place and tighten bolts. Easy to handle. Complete with straps and necessary hardware.

#### GALVANIZED STEEL STRAPPING

S010-CM	Mount with 3/4" x 10 ft. Straps	39 lbs.	12
S012-CM	Mount with 3/4" x 12 ft. Straps	42 lbs.	12
S018-CM	Mount with 3/4" x 18 ft. Straps	49 lbs.	12

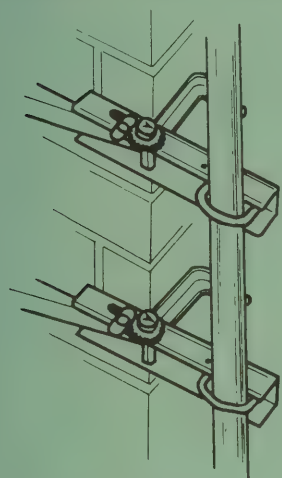
#### STAINLESS STEEL STRAPPING

S012-CM-SS	Mount with 3/4" x 12 ft. Straps	41 lbs.	12
S018-CM-SS	Mount with 3/4" x 18 ft. Straps	48 lbs.	12

**EXCLUSIVE  
HEAVY-DUTY  
MAST CLAMP**



# ROHN<sup>®</sup> CHIMNEY MOUNTS



## NEW RATCHET TYPE CHIMNEY MOUNT

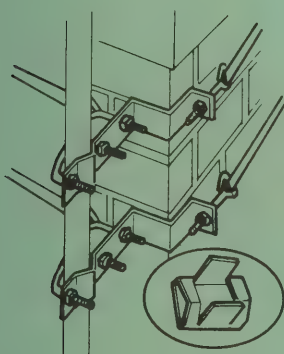
A new concept in antenna mounts. Easily installed. A quality constructed chimney mount designed to withstand high winds and adverse weather conditions. Requires only a wrench to fasten to chimney. The Ratchet Mount is clear chromate finished for long life. Accepts masts up to 1½" in diameter. Available in stainless steel or galvanized strapping in 12 or 18 ft. lengths. Complete with straps and necessary hardware.

### GALVANIZED STEEL STRAPPING

RT-12	Mount with ¾" x 12 ft. Straps	46 lbs.	12
RT-18	Mount with ¾" x 18 ft. Straps	53 lbs.	12

### STAINLESS STEEL STRAPPING

RT-12-SS	Mount with ¾" x 12 ft. Straps	43 lbs.	12
RT-18-SS	Mount with ¾" x 18 ft. Straps	48 lbs.	12



## ROHN SPECIAL "Z" CHIMNEY MOUNT

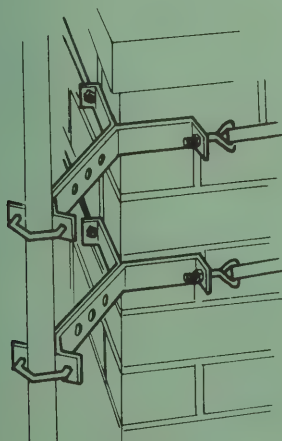
Steel zinc plated finish with galvanized or stainless steel strapping. Eye bolts attached to one end of each. For masts to 1½" diameter. Complete with straps and necessary hardware.

### GALVANIZED STEEL STRAPPING

EZ-10-CM	Mount with ⅝" x 10 ft. Straps	29 lbs.	12
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### STAINLESS STEEL STRAPPING

EZ-10-CM-SS	Mount with ⅝" x 10 ft. Straps	27 lbs.	12
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## ROHN "Y" CHIMNEY MOUNT

Galvanized finish. Three solid rivet construction. Accepts masts up to 1½" diameter. Serrated U-bolts prevent mast slipping. Complete with straps and necessary hardware.

### GALVANIZED STEEL STRAPPING

Y-12-CM	Mount with ¾" x 12 ft. Straps	39 lbs.	12
Y-18-CM	Mount with ¾" x 18 ft. Straps	45 lbs.	12

### STAINLESS STEEL STRAPPING

Y-12-CM-SS	Mount with ¾" x 12 ft. Straps	36 lbs.	12
Y-18-CM-SS	Mount with ¾" x 18 ft. Straps	42 lbs.	12

# ROHN®

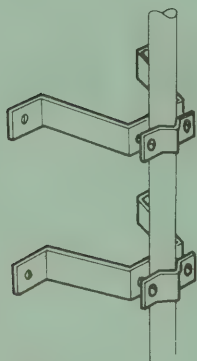
## TV ANTENNA WALL MOUNTS

PART NO.

DESCRIPTION

WEIGHT  
PER STD.  
CARTON

STD.  
CARTON



### V-7 WALL MOUNT

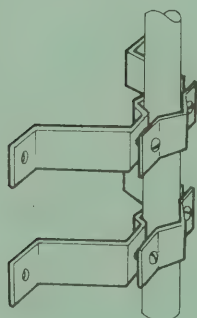
Constructed of heavy gauge steel. Fully plated U-bolt, nuts and installation hardware. Zinc plated for long life, weather protection. Installation hardware included.

VWM-7

Wall mount, 7" clearance

42 lbs.

25



### 4" SPECIAL WALL MOUNT

Low priced economy wall mount for close mounting. Made of heavy gauge steel, installation hardware included.

VWM-4

Wall mount, zinc plated, 4" clearance

52 lbs.

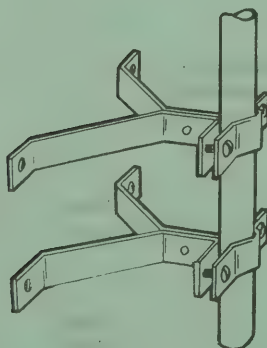
50

WM-4X

Extra Heavy Deluxe 4" Wall mount, galvanized — Packed with lock carriage bolt and 1 3/4" lag bolts. Will accommodate all mast sizes from 1 1/4" thru 2 1/2"

46 lbs.

24



### CLOSE WALL MOUNT

Inexpensive close wall-mounting brackets. Ideal for areas where large clearance is not needed. Made of extra heavy gauge steel. Zinc plated and clear chromate dipped for double weather protection. Will accept masts up to 1 3/4" diameter. All installation hardware included.

YWM-2

Wall mount, 2 1/4" clearance

16 lbs.

12

YWM-4

Wall mount, 4" clearance

21 lbs.

12





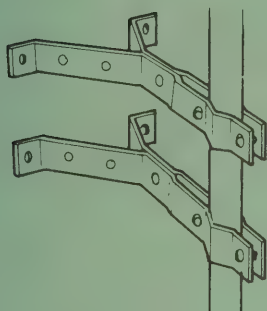
## TV ANTENNA WALL MOUNTS

PART NO.

DESCRIPTION

WEIGHT  
PER STD.  
CARTON

STD.  
CARTON



### "SNAP-IN" WALL MOUNT

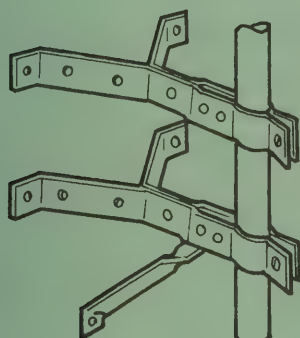
Simply snap mast into brackets, tighten bolts, and the job is done. Brackets made of heavy gauge steel, zinc plated and clear chromate dipped for long life. All installation hardware included. Accepts masts up to 1 $\frac{3}{4}$ " diameter.

SWM-6  
SWM-8

6" Snap-in wall mount  
8" Snap-in wall mount

24 lbs.  
36 lbs.

12  
12



### MASTER DELUXE "SNAP-IN" WALL MOUNT

Brackets are spaced 16" wide for fastening to 16", 2 x 4 centers. Eliminates "side sway" in antennas. Made of extra heavy gauge steel, zinc plated and clear chromate dipped for double weather protection. Will accept masts up to 1 $\frac{3}{4}$ " diameter. All installation hardware included.

SWM-12  
SWM-18  
SWM-24

Wall mount, 12" clearance  
Wall mount, 18" clearance  
Wall mount, 24" clearance

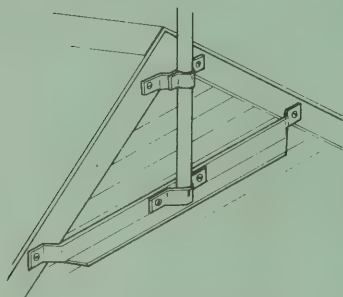
48 lbs.  
78 lbs.  
53 lbs.

12  
12  
6

**ROHN**<sup>®</sup>**TV ANTENNA PEAK AND VENT MOUNTS**

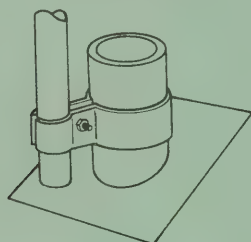
PART NO.

DESCRIPTION

WEIGHT  
PER STD.  
CARTONSTD.  
CARTON**ROHN PEAK MOUNT**

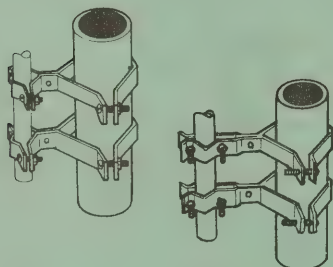
Convenient method for mounting TV antennas. Easily installed, the peak mount is made of extra heavy gauge steel, zinc plated, clear chromate dipped for long life. Accepts masts up to 1 3/4" diameter. Complete with installation hardware.

EM-18	Peak mount, 18" lower support	29 lbs.	12
EM-30	Peak mount, 30" lower support	46 lbs.	12
EM-48	Peak mount, 48" lower support	35 lbs.	6

**ROHN VENT MOUNT**

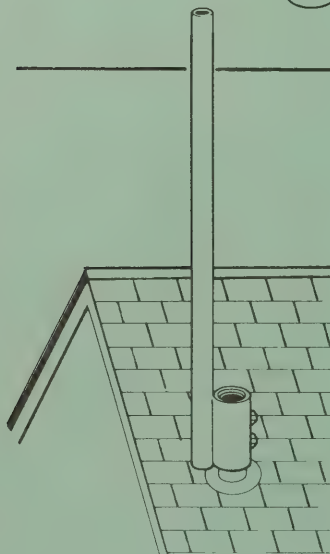
For mounting TV antennas on vents up to 2 1/4" diameter. Made of extra heavy gauge steel, zinc plated. Accepts masts up to 1 1/4" diameter. Complete with necessary hardware.

EVP-2	Vent Mount	25 lbs.	25
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**ROHN VENT MOUNT**

An easy-to-use vent mount that will clamp on any size vent or pipe. Only 2 pieces to clamp with bolts. Made of extra heavy gauge steel, zinc plated and clear chromate dipped for double weather protection. Heavy, new clamp on side. Complete with necessary hardware.

VP-40	Vent mount, for vents 2" to 4"	26 lbs.	12
VP-60	Vent mount, for vents 4" to 6"	32 lbs.	12

**VENT PIPE CLAMP WITH MAST**

- Quickly, easily slips over vent pipe and clamps firmly in position! Complete with hardware.
- No Guy Wires Necessary
- Strong, Rigid, Safe Mount
- Clamps Fit All Vent Pipes
- Hot-Dip Galvanized

VPM-210	10' hot-dipped galvanized mast with clamp to accommodate 2 1/4" O.D. vent pipe	11 lbs.	1
VPM-310	10' hot-dipped galvanized mast with clamp to accommodate 2 3/4" O.D. vent pipe	11 lbs.	1
VPM-305	5' hot-dipped galvanized mast with clamp to accommodate 2 3/4" O.D. vent pipe	6 lbs.	1
VPM-510	10' hot-dipped galvanized mast with clamp to accommodate 4 1/2" O.D. vent pipe	14 lbs.	1
VPM-505	5' hot-dipped galvanized mast with clamp to accommodate 4 1/2" O.D. vent pipe	10 lbs.	1

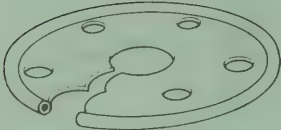
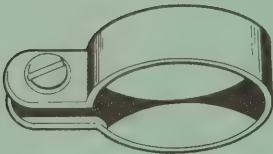






# LIGHTNING ARRESTORS AND ACCESSORIES

PART NO.	DESCRIPTION	WEIGHT PER STD. CARTON	STD. CARTON
LA-1	<b>UNIVERSAL UHF/VHF LIGHTNING ARRESTOR</b> With Grounding Lug and Mounting Strap. Fits all types of lines: UHF, VHF, hollow, oval, open, square, and regular. Underwriters approved for both indoor and outdoor use.	16 lbs.	100
LA-2	<b>UNIVERSAL UHF/VHF LIGHTNING ARRESTOR</b> With Mounting Strap. With features available only in the finest arrestors. Low-loss design. For all types of lead-in lines: UHF, VHF, hollow, oval, open, square.	15 lbs.	100
UT-B UT-I	<b>UNIVERSAL LEAD-IN TUBES</b> Designed to fit all lines. Low-loss material; weather-proof seal. May be cut to desired length; fits through 3/4" hole, and walls up to 14" thick. Lead-in tube, brown Lead-in tube, ivory	4 lbs. 4 lbs.	10 10
3WK 3WK-B	<b>3-WAY TV LINE KLIP</b> Line klip Basket of 1000	1/2 lbs. 44 lbs.	10 1000
MCA	<b>ROHN MAST CLAMP ASSEMBLY</b> Complete clamp assembly to fasten cross bars to mast. Edges serrated to prevent twisting.	23 lbs.	100

**ROHN**<sup>®</sup>**GUY WIRE ACCESSORIES**

PART NO.	DESCRIPTION	WEIGHT PER STD. CARTON	STD. CARTON
<b>ROLLED EDGE GUY RINGS</b>			
			
	Mast size		
GR-1	1¼"	17 lbs.	100
GR-2	1½"	17 lbs.	100
GR-3	1¾"	17 lbs.	100
GR-4	2"	20 lbs.	100
GR-5	2¼"	20 lbs.	100
<b>GUY RING CLAMP</b>			
			
	Holds guy ring in place. Ring is full floating when clamped on mast.		
C-100	For masts of ¾" to 1"	3 lbs.	100
C-125	For masts of 1¼" to 1¾"	4 lbs.	100
<b>CABLE CLAMP</b>			
			
	Heavy gauge steel . . . Zinc plated . . . Fits guy wires from ⅛" to ¾"		
¾CCM	¾" Cable Clamp-Standard size	5 lbs.	100
⅜CCM	⅜" Cable Clamp-Small size	3 lbs.	100
<b>GUY WIRE THIMBLE</b>			
			
	Prevents wire from fraying and loosening.		
¼ Th.	Guy Wire Thimble. For all sizes wire up to ¼"	4 lbs.	100



# MOTOROLA

## BASE STATION AUXILIARY SPEAKER KITS



MODEL TSN6006A OR TSN6007A AUXILIARY  
SPEAKER KIT

MODEL TABLE

MODEL	DESCRIPTION
TSN6005A	Auxiliary Speaker Kit, 3 ohms input impedance
TSN6006A	Auxiliary Speaker Kit with volume control; approximately 3 ohms input impedance
TSN6007A	Auxiliary Speaker Kit with volume control and impedance matching transformer; 500 ohms input impedance

### 1. DESCRIPTION

The Auxiliary Speaker Kit provides an additional speaker for use with a base station or the remote control console associated with the base station. The speaker housing includes rubber feet for convenient placement on a desk top or other working surface.

A choice of one of the three models listed in the preceding table provide flexibility of application. A 3-ohm unit with or without volume control is available for parallel connection with the existing remote control speaker, or a 500-ohm input unit is available for connection across the high impedance audio line.

### 2. CONNECTIONS

Each of the Auxiliary Speaker Kits can be connected in parallel with the existing base station or remote control speaker. When such parallel connection is made, the audio performance characteristics will remain at a satisfactory level.

The TSN6005A or TSN6006A Auxiliary Speaker Kit should be connected with a two-wire line (not supplied) to the terminal board or other point of the remote control unit of the base station which will provide a 3-ohm supply. The TSN6005A model may be connected to be under the control of the remote control console speaker volume control.

Connect the TSN6007A Auxiliary Speaker Kit (which presents a 500-ohm input impedance) to the primary of the base station impedance-matching speaker transformer.



**MOTOROLA INC.**

Engineering Publications

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COMMUNICATIONS DIVISION

Chicago 51, Illinois

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6/12/63-NP





## GUY WIRE ACCESSORIES

PART NO.

DESCRIPTION

WEIGHT  
PER STD.  
CARTON

STD.  
CARTON



### TURNBUCKLES

	SIZE CLOSED	SIZE OPEN	TAKE UP	BOLT SIZE		
EE-30	3 $\frac{3}{8}$ "	4 $\frac{5}{8}$ "	1 $\frac{1}{4}$ "	$\frac{5}{16}$ "	5 lbs.	100
EE-40	4"	5 $\frac{5}{8}$ "	1 $\frac{5}{8}$ "	$\frac{3}{16}$ "	8 lbs.	100
EE-45	4 $\frac{1}{2}$ "	6 $\frac{3}{8}$ "	1 $\frac{7}{8}$ "	$\frac{7}{32}$ "	11 lbs.	100
EE-55	5 $\frac{1}{2}$ "	7 $\frac{5}{8}$ "	2 $\frac{1}{8}$ "	$\frac{1}{4}$ "	24 lbs.	100
EE-65	6 $\frac{3}{4}$ "	9 $\frac{1}{4}$ "	2 $\frac{1}{2}$ "	$\frac{3}{16}$ "	13 lbs.	50
EE-75	7 $\frac{1}{2}$ "	10 $\frac{1}{2}$ "	3"	$\frac{3}{8}$ "	24 lbs.	50



### GROUND ROD

Heavy gauge steel rod, heavy copper plated, with sharp point for easy installation. Ground wire clamp included. Assembled on rod. Hot-dip galvanized also available.

GR-384	4 ft. $\frac{3}{8}$ " diameter copper	42 lbs.	25
GR-384Z	4 ft. $\frac{3}{8}$ " diameter hot-dipped galvanized	42 lbs.	25
GR-386	6 ft. $\frac{3}{8}$ " diameter copper	53 lbs.	25
GR-386Z	6 ft. $\frac{3}{8}$ " diameter hot-dipped galvanized	53 lbs.	25



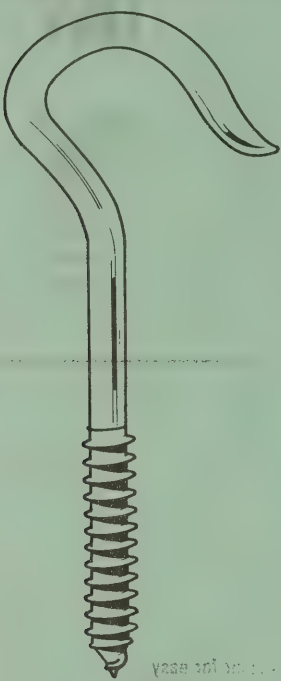

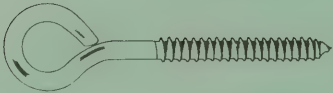
### SLOTTED HEX WASHER HEAD LAG SCREW

Steel, zinc plated lag screw especially made for TV antenna installations and brackets.

8061	5/16" x 1 3/4" long	7 $\frac{1}{2}$ lbs.	100
2550	1/4" x 1 1/2" long		



**ROHN**<sup>®</sup>**GUY WIRE ACCESSORIES**

	PART NO.	DESCRIPTION	WEIGHT PER STD. CARTON	STD. CARTON
		<b>SCREW HOOK</b> 3½" long Hook opening ⅞" Wire size ⅝"		
	SH-3½	Screw Hook Steel Zinc Plated	4 lbs.	100
		<b>SCREW HOOK</b> 4" long Hook opening 1⅞" Wire size ⅝"		
	SH-4	Screw Hook Steel Zinc Plated	7 lbs.	100
		<b>SCREW HOOK</b> 4½" long Hook opening 1¼" Wire size ⅝"		
	SH-4½	Screw Hook Steel Zinc Plated	11 lbs.	100
		<b>SCREW HOOK</b> 5" long Hook opening 1⅞" Wire size ⅝"		
	SH-5	Screw Hook Steel Zinc Plated	15 lbs.	100
		<b>SCREW EYE</b> 2" Long — ⅜" Eye Dia. Screw Eye Steel Zinc Plated		
	WEB-2		3 lbs.	100
		<b>SCREW EYE</b> 3½" Long — ¾" Eye Dia. Screw Eye Steel Zinc Plated		
	WEB-3½		5 lbs.	100
		<b>SCREW EYE</b> 5" Long — ¾" Eye Dia. Screw Eye Steel Zinc Plated		
	WEB-5		9 lbs.	100

LOCK CURVE  
PREVENTS WIRE  
FROM SLIPPING OFF

# ROHN<sup>®</sup>

## ASSEMBLED (WELDED) TV SERVICE TABLES

The perfect answer to your television set servicing . . . and for mobile TV service in hotels, motels, hospitals, institutions, etc.

Provides an absolutely flat surface 24" x 24", 30½" high. 2½" casters give smooth ride. Baked enamel finish.

TVST-500 without shelf; TVST-600 with shelf.

---

CATALOG NO.	WEIGHT
-------------	--------

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TVST-500

28 lbs.

TVST-600

30 lbs.



# ROHN®

## KNOCK-DOWN SERVICE TABLE (READY TO ASSEMBLE)

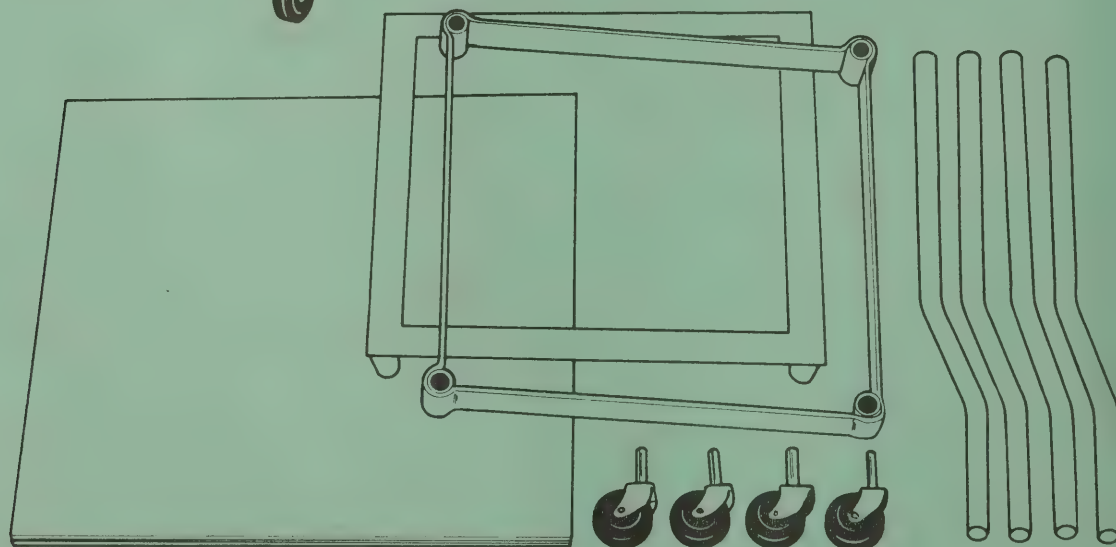


Lightweight, yet sturdy and easy to handle! Baked enamel finish.

24" x 24" plywood and masonite top is absolutely flat. The 30½" height is ideal for servicing.

Complete with 2½" casters.

CATALOG NO.	WEIGHT
TVST-500-KD	25 lbs.





ROHN & VULCAN HARDWARE

PART NO.	LIST	SUGG'D. DEALER	WT.	PART NO.	LIST	SUGG'D. DEALER	WT.
1/8 CCM	.30 ea	.21 ea	3/C	5½WMS-U	12.10/C	7.27/C	4½/C
3/16 CCM	.35 ea	.25 ea	5/C	<u>/D/</u> 5½WS-F	11.50/C	6.91/C	5/C
1/4 Th.	.21 ea	.15 ea	4/C	<u>/D/</u> 5½WS-U	11.50/C	6.91/C	5/C
1AM	9.15 ea	5.50 ea	60/24	7½MS-F	32.75/C	19.64/C	12/C
2UMB	2.60 ea	1.55 ea	28/24	7½MS-IF	53.30/C	31.96/C	13½/C
2½" caster	2.85 ea	2.00 ea	40/C	7½MS-IU	53.30/C	31.96/C	13½/C
3TS1-F	16.10/C	9.65/C	4/C	7½MS-SS-F	40.00/C	24.00/C	12/C
3TS1-U	16.10/C	9.65/C	4/C	7½MS-SS-IF	60.60/C	36.34/C	13½/C
3TS1¼-F	17.00/C	10.20/C	4½/C	7½MS-SS-IU	60.60/C	36.34/C	13½/C
3TS1¼-U	17.00/C	10.20/C	4½/C	7½MS-SS-U	40.00/C	24.00/C	12/C
3TS1½-F	18.20/C	10.90/C	5/C	7½MS-U	32.75/C	19.64/C	12/C
3TS1½-U	18.20/C	10.90/C	5/C	7½WMS-F	13.90/C	8.34/C	6/C
3½MS-F	25.40/C	15.24/C	9½/C	7½WMS-IF	35.00/C	20.99/C	7/C
3½MS-SS-F	32.70/C	19.60/C	9½/C	7½WMS-IU	35.00/C	20.99/C	7/C
3½MS-SS-U	32.70/C	19.60/C	9½/C	7½WMS-U	13.90/C	8.34/C	6/C
3½MS-U	25.40/C	15.24/C	9½/C	<u>/D/</u> 7½WS-F	13.35/C	8.01/C	6/C
3½WMS-F	7.00/C	4.20/C	3¼/C	<u>/D/</u> 7½WS-IF	30.30/C	19.98/C	9/C
3½WMS-U	7.00/C	4.20/C	3¼/C	<u>/D/</u> 7½WS-IU	30.30/C	19.98/C	9/C
<u>/D/</u> 3½WS-F	9.75/C	5.85/C	3½/C	<u>/D/</u> 7½WS-U	13.35/C	8.01/C	6/C
<u>/D/</u> 3½WS-U	9.75/C	5.85/C	3½/C	9WM	20.60/C	12.35/C	6/C
5½MS-F	31.10/C	18.64/C	10½/C	9WM-SS	25.35/C	15.20/C	6/C
5½MS-SS-F	38.40/C	23.04/C	10½/C	2550	.10 ea	.06 ea	2/C
5½MS-SS-U	38.40/C	23.04/C	10½/C	8061	.18 ea	.11 ea	4/C
5½MS-U	31.10/C	18.64/C	10½/C	AP 1-3/4	5.45 ea	3.28 ea	26/12
5½WMS-F	12.10/C	7.27/C	4½/C	AP20	3.25 ea	1.95 ea	37/25
				AP30	3.40 ea	2.05 ea	37/25
				AP40	3.65 ea	2.20 ea	40/25
				AP50	3.85 ea	2.30 ea	40/25
				AP0	2.60 ea	1.55 ea	37/25
				AP0-Jr	1.65 ea	1.00 ea	50/50
				C-2	32.10/C	19.25/C	13/C
				C-3	32.10/C	19.25/C	13/C
				C-4	32.10/C	19.25/C	13/C

/D/ To be discontinued.

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ROHN & VULCAN HARDWARE

PART NO.	LIST	SUGG'D. DEALER	WT.	PART NO.	LIST	SUGG'D. DEALER	WT.
C-5	32.10/C	19.25/C	13/C	GR-386	4.00 ea	2.40 ea	53/25
C-6	32.10/C	19.25/C	13/C	GR-386Z	3.35 ea	2.00 ea	53/25
C-125	19.70/C	11.80/C	4/C	GT3½-F	51.10/C	30.66/C	10½/C
Caster socket	.70 ea	.50 ea	10/C	GT3½-U	51.10/C	30.66/C	10½/C
EE-30	36.15/C	21.67/C	5/C	GTMB	3.40 ea	2.05 ea	3 ea
EE-40	40.30/C	24.17/C	8/C	GTMB-H	4.90 ea	2.95 ea	3 ea
EE-45	43.90/C	26.33/C	11/C	GTMB-T	3.25 ea	1.95 ea	3 ea
EE-55	52.15/C	31.29/C	24/C	MCA	.77 ea	.46 ea	23/C
EE-65	89.95/C	53.96/C	13/50	MDI-F	26.10/C	15.64/C	6/C
EE-75	130.00/C	77.97/C	24/50	MDI-U	26.10/C	15.64/C	6/C
ETMB	2.50 ea	1.50 ea	12/12	R-2	16.10/C	9.65/C	15/C
ETMB-150	2.15 ea	1.30 ea	7/12	R-3	16.10/C	9.65/C	15/C
ETMB-200	2.75 ea	1.65 ea	12/12	R-4	19.25/C	11.55/C	15/C
ETMB-250	3.10 ea	1.85 ea	14/12	R-5	19.25/C	11.55/C	15/C
EVP-2	2.40 ea	1.45 ea	25/25	R-6	19.25/C	11.55/C	15/C
<u>/D/</u> EZ3½WMS	16.70/C	10.01/C	3½/C	<u>/D/</u> RT-12	7.25 ea	4.33 ea	46/12
<u>/D/</u> EZ5½WMS	18.30/C	10.96/C	5/C	<u>/D/</u> RT-18	8.25 ea	4.94 ea	53/12
<u>/D/</u> EZ7½WMS	20.95/C	12.56/C	6½/C	SB125	2.00 ea	1.20 ea	25/50
<u>/D/</u> EZ7½WMS-I	35.55/C	21.32/C	9/C	SH-3½	12.25/C	7.35/C	4/C
<u>/D/</u> EZ-10-CM	4.00 ea	2.38 ea	29/12	SH-4	19.00/C	11.40/C	7/C
<u>/D/</u> EZ-10-CM-SS	5.05 ea	3.01 ea	27/12	SH-4½	21.80/C	13.07/C	11/C
GM-1	27.85 ea	16.70 ea	13 ea	SH-5	34.50/C	20.69/C	15/C
GR-1	22.35/C	13.40/C	17/C	<u>/D/</u> SO10-CM	5.50 ea	3.30 ea	39/12
GR-2	22.35/C	13.40/C	17/C	<u>/D/</u> SO12-CM	5.65 ea	3.40 ea	42/12
GR-3	25.70/C	15.40/C	17/C	<u>/D/</u> SO12-CM-SS	8.15 ea	4.90 ea	41/12
GR-4	25.70/C	15.40/C	20/C	<u>/D/</u> SO18-CM	6.75 ea	4.05 ea	49/12
GR-5	25.70/C	15.40/C	20/C	<u>/D/</u> SO18-CM-SS	10.15 ea	6.10 ea	48/12
GR-384	3.10 ea	1.85 ea	42/25				
GR-384Z	2.40 ea	1.45 ea	42/25				

/D/ To be discontinued.

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PART NO.	LIST	SUGG'D. DEALER	WT.	PART NO.	LIST	SUGG'D. DEALER	WT.
SOSO-F	20.00/C	12.00/C	8/C	* TVST-500	28.60 ea	20.00 ea	28 ea
SOSO-U	20.00/C	12.00/C	8/C	TVST-500-KD	24.30 ea	17.15 ea	25 ea
SWM-6	4.25 ea	2.55 ea	24/12	* TVST-600	32.65 ea	22.85 ea	30 ea
SWM-8	5.40 ea	3.23 ea	36/12	UM20	3.50 ea	2.10 ea	44/25
<u>/D/</u> SWM-12	7.00 ea	4.20 ea	48/12	UM30	3.65 ea	2.20 ea	44/25
<u>/D/</u> SWM-18	9.20 ea	5.51 ea	78/12	UM40	4.00 ea	2.40 ea	46/25
<u>/D/</u> SWM-24	12.70 ea	7.61 ea	53/6	UM50	4.35 ea	2.60 ea	46/25
TMB-150	3.25 ea	1.95 ea	16/12	<u>/D/</u> UT-B	2.85 ea	1.72 ea	4/10
TMB-200	3.65 ea	2.20 ea	17/12	<u>/D/</u> UT-I	2.85 ea	1.72 ea	4/10
TMB-250	4.00 ea	2.40 ea	19/12	VP-40	5.25 ea	3.15 ea	26/12
TMC	4.00 ea	2.40 ea	3 ea	VP-60	5.25 ea	3.15 ea	32/12
TMCS-1	2.00 ea	1.20 ea	½ ea	VPM-210	5.75 ea	3.45 ea	11 ea
TMCS-2	2.50 ea	1.50 ea	1 ea	VPM-305	4.85 ea	2.90 ea	6 ea
TRM-4	6.00 ea	3.60 ea	9 ea	VPM-310	6.90 ea	4.15 ea	11 ea
TRM-4B	6.90 ea	4.15 ea	10 ea	VPM-505	6.35 ea	3.80 ea	10 ea
TRT-20AG	38.95 ea	23.35 ea	30 ea	VPM-510	8.25 ea	4.95 ea	14 ea
TRT-30	8.65 ea	5.20 ea	6 ea	VWM-4	1.70 ea	1.02 ea	52/50
TRT-30B	10.35 ea	6.20 ea	8 ea	VWM-7	3.60 ea	2.15 ea	42/25
<u>/N/</u> TRT-30G	9.75 ea	5.85 ea	6 ea	WEB-2	8.55/C	5.12/C	3/C
TRT-30GB	11.40 ea	6.85 ea	8 ea	WEB-3½	18.60/C	11.15/C	5/C
TRT-36	10.00 ea	6.00 ea	7 ea	WEB-5	20.20/C	12.10/C	9/C
TRT-36B	12.00 ea	7.20 ea	9 ea	WM-4X	2.75 ea	1.65 ea	46/25
<u>/N/</u> TRT-36G	10.85 ea	6.50 ea	7 ea	<u>/D/</u> Y-12-CM	6.45 ea	3.85 ea	39/12
TRT-36GB	12.85 ea	7.70 ea	9 ea	<u>/D/</u> Y-12-CM-SS	8.40 ea	5.03 ea	36/12
TRT-60	16.15 ea	9.70 ea	10 ea	<u>/D/</u> Y-18-CM	7.45 ea	4.46 ea	45/12
TRT-60B	18.35 ea	11.00 ea	12 ea	<u>/D/</u> Y-18-CM-SS	10.15 ea	6.07 ea	42/12
<u>/N/</u> TRT-60G	17.95 ea	10.75 ea	10 ea	<u>/D/</u> Z-10-CM	4.35 ea	2.62 ea	30/12
TRT-60GB	20.20 ea	12.10 ea	12 ea	<u>/D/</u> Z-12-CM	5.00 ea	3.00 ea	32/12
TRT-112	25.00 ea	15.00 ea	25 ea	<u>/D/</u> Z-12-CM-SS	6.95 ea	4.18 ea	30/12
TRT-120	29.95 ea	17.95 ea	24 ea	<u>/D/</u> Z-18-CM	6.00 ea	3.60 ea	39/12
TRT-BAG	3.50 ea	2.10 ea	½ ea				

/N/ New Item.

/D/ To be discontinued.

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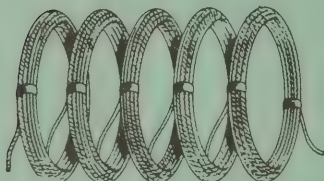
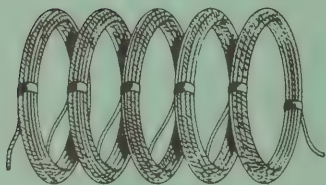
\* NOTE: Add \$4.00 on TVST-500 and \$4.25 on TVST-600 on shipments to the following states: Ariz., Calif., Colo., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo., Alaska, Hawaii, and Alberta, B.C., and Sask., Canada.

F.O.B. PEORIA, ILLINOIS - or - BIRMINGHAM, ALABAMA

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



## GROUND WIRE – GUY WIRE



**DESCRIPTION:** ALUMINUM GROUND WIRE Uncoated, pliable. Grounds mast from lightning and electrical disturbances.

**PART NO.** **No. 8 SOLID WIRE**  
AGW-8.....(10-100' coils).....1000 ft. **STD. CARTON**

**DESCRIPTION:** STEEL STRANDED GUY WIRE

- Heavy galvanized steel
- Rust-proof
- Non-tangling interconnected coils

**6 STRAND — 20 GAUGE**  
620.....(20-50' INTERCONNECTED COILS).....1000 ft.  
**PART NO.** **6 STRAND — 18 GAUGE**  
618.....(20-50' INTERCONNECTED COILS).....1000 ft.  
618-2.....(10-50' INTERCONNECTED COILS).....500 ft. **STD. CARTON**

**DESCRIPTION:** PLASTI-FLEX GUY WIRE

- Heavy galvanized steel
- Heavy duty vinyl jacket
- Rust-proof — non-staining — weather-proof
- Unaffected by snow, chemical fumes, changes in temperature
- Non-tangling interconnected coils

**PART NO.** **6 STRAND — 20 GAUGE**  
750.....(20-50' INTERCONNECTED COILS).....1000 ft. **STD. CARTON**

PRICE SHEET D-82460  
(Replaces D-80460)

Mar. 1, 1972

### ROHN & VULCAN TV WIRE

<u>PART NO.</u>	<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
AGW-8	30.45/M	18.25/M	17/Mft
620	14.75/M	8.85/M	19/Mft
618	25.00/M	15.00/M	32/Mft
618-2	25.00/M	15.00/M	32/Mft
750	37.10/M	22.25/M	24/Mft

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PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

# Best in quality — new improved design

# ROHN TELESCOPING MASTS

ROHN has the best in telescoping masts because they have sound design, unexcelled construction, and highest quality. A careful check of the details and features of ROHN masts proves this beyond doubt!

## DESIGN

All ROHN telescoping masts are available in models of 20, 30, 40 and 50. All are equipped with special clamp and guy ring arrangement. The clamps firmly support each section as it is pushed up, holding it in place so that it does not slip down. When the section is fully extended, this clamp is tightened down with "L" Bolt to permanently hold the section in place. A heavy duty cotter pin is then inserted for additional support.

Another desirable design feature is flanging the interior tubing and crimping the exterior tubing so as to give a firmer and sturdier joint. (This feature is shown by the cut-away drawing, No. 1 at right.) Guy rings are on top of crimped area of each section except for the bottom section (as shown in drawing No. 2) in which a die-flanged area supports the lower guy ring so that the mast may be guyed before the other sections are hoisted. This guy ring on bottom section means easier installation without binding.

## CONSTRUCTION

Only heavy-duty, hot-dipped galvanized steel tubing is used. The hot-dipped method is far superior to strip tubing because hot-dipping means that the entire mast is protected from corrosion! Lower end of each section is flanged so that the sections cannot pull apart. However, all sections can be pulled out the lower end of the mast, if desired. Sections cannot twist as cotter pin in special slotted notches prevent this! (See drawing No. 1.)

## INSTALLATION

Absolute ease in installation. Mast comes complete—fully assembled with heavy-duty guy rings and clamps installed—ready for instant erection. All that is required is pull the sections up, tighten the clamp and place the cotter pin. It's as simple as that!

**NOTE:**

- ★ All tubing galvanized after fabrication.
- ★ No pre-galvanized strip tubing used in any ROHN mast!
- ★ No tubing lighter than 18-gauge used!

Others cannot claim these outstanding features.

FOR MAST BASES AND MOUNTS, SEE CATALOG SHEET

### SPECIFICATIONS

#### MODELS:

**ETMD Series**—1¼" section is 15-gauge tubing. All other sections are 17-gauge tubing.  
**MTE Series**—All sections are 17-gauge tubing.

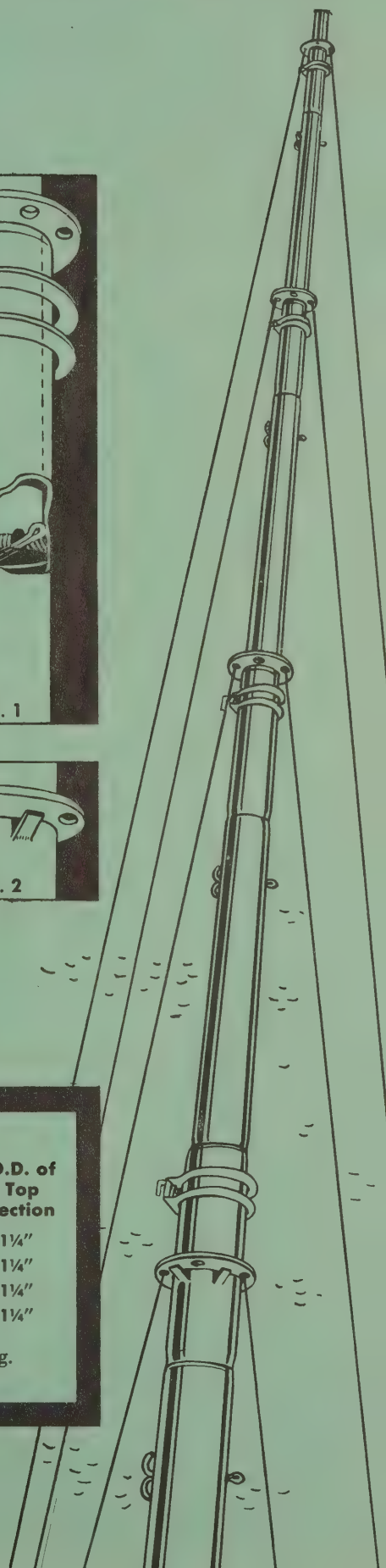
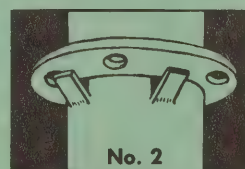
ETMD-20, MTE-20,  
 ETMD-30, MTE-30,  
 ETMD-40, MTE-40,  
 ETMD-50, MTE-50,

O.D. of Bottom Section	O.D. of Top Section
1½"	1¼"
1¾"	1¼"
2"	1¼"
2¼"	1¼"

**NOTE:** All Series have "L" Bolt for locking.

# ROHN

Manufacturing Co  
 PEORIA, ILLINOIS



ROHN TELESCOPING MASTS

(With All Hardware Except Base)

IMPORTANT

ROHN ETMD and MTE series telescoping masts are made from high strength tubing and are completely galvanized after the tubing is formed and welded. "True hot-dip" galvanized tubing with no uncoated seams -- highest quality available! All masts completely assembled with guy rings and clamps. ETMD and MTE series all use full 10' length tubing throughout.

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
ETMD-20		20.20	12.10	17
ETMD-30		31.60	18.95	26
ETMD-40		44.20	26.50	37
ETMD-50		59.20	35.50	49
MTE-20		17.70	10.60	15
MTE-30		28.35	17.00	25
MTE-40		40.35	24.20	35
MTE-50		54.60	32.75	48
MT-15-3	15' telescoping mast using three 5' sections (1 $\frac{1}{4}$ ", 1 $\frac{1}{2}$ " & 1 $\frac{3}{4}$ " tubing)	15.35	9.20	15

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>
# 161004GH	1 1/20" x 10' - 16 gauge - with plain end (10 pieces per bundle - 10' lengths)	4.35 ea	2.60 ea

# ROHN ETMD and MTE series telescoping masts have top section drilled to accept an extra piece of tubing (161004GH) to increase height.

ROHN telescoping mast sections cannot pull apart, but the sections can be disassembled through the lower end of the mast if desired.

Telescoping masts are not recommended for commercial or ham installations.

F.O.B. PEORIA, ILLINOIS

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ROHN ECONOMY TELESCOPING MASTS

(With All Hardware Except Base)

Pre-galvanized tubing with competitive staggered length feature.

H (formerly 16) series uses 1 $\frac{1}{4}$ " and 1 $\frac{1}{2}$ ", 16 gauge tubing with all other sections 18 gauge.

E (formerly 18) series uses 1 $\frac{1}{4}$ ", 1 $\frac{1}{2}$ ", and 2 $\frac{1}{4}$ ", 18 gauge tubing with all other sections 20 gauge.

<u>PART NO.</u>	<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
H-20 (1620)	16.40	9.85	15
H-30 (1630)	24.60	14.75	25
H-40 (1640)	33.70	20.20	33
H-50 (1650)	43.95	26.35	43
E-20 (1820)	13.50	8.10	14
E-30 (1830)	20.70	12.40	22
E-40 (1840)	29.20	17.50	30
E-50 (1850)	39.35	23.60	39

Note: Use new telescoping mast numbers. Old numbers in parentheses will be deleted in future printings.

ROHN telescoping mast sections cannot pull apart, but the sections can be disassembled through the lower end of the mast if desired.

Telescoping masts are not recommended for commercial or ham installations.

F.O.B. PEORIA, ILLINOIS

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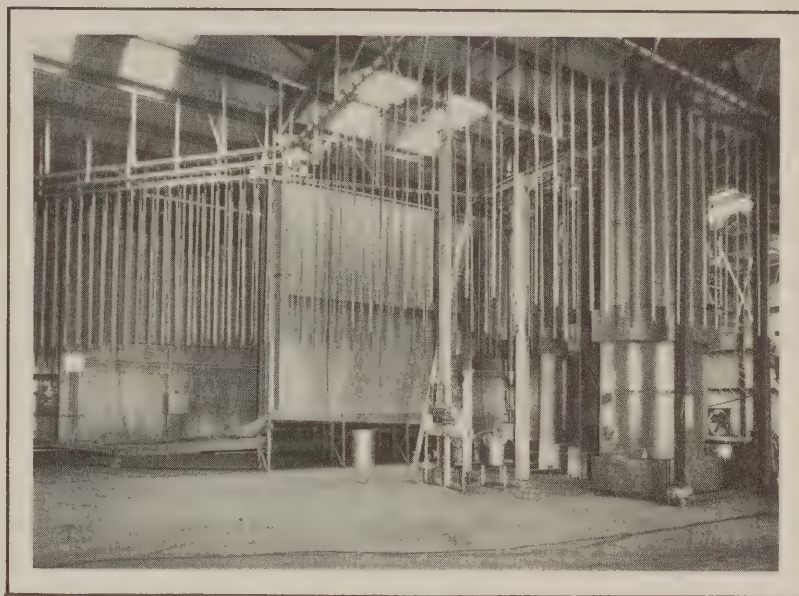
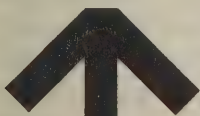
# ROHN®—VULCAN PRODUCTS

## Now offered in .....CUSTOM ELECTROSTATIC PAINTING...

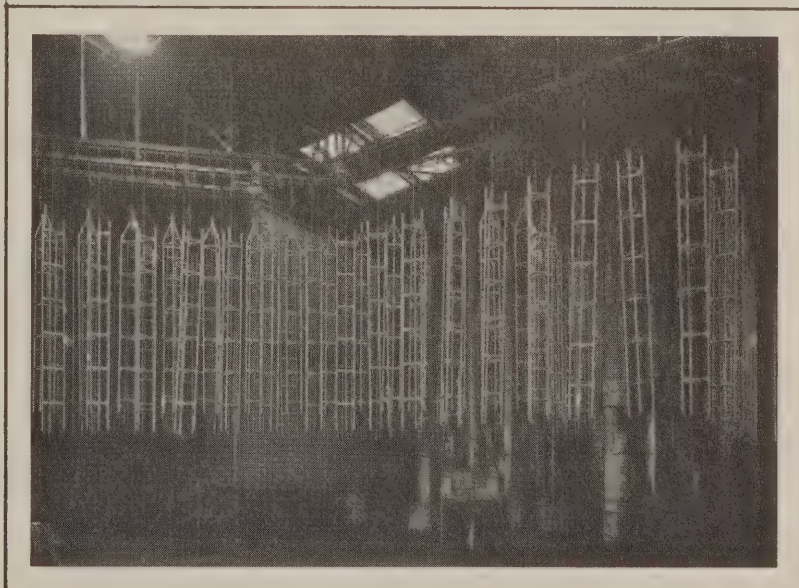
Ransburg electrostatic Spray Process—the finest application available . . .



**THE PROCESS:** This system, known as the Ransburg electrostatic spray process, charges paint particles so they are attracted to the work to be painted. This gives near perfect painting control, producing an extremely uniform finish in both color and thickness. Also used is a *four-stage* cleaning process which degreases the work and applies an iron or zinc phosphate coating. This coating bonderizes the paint to the work and prohibits rust. Black steel, galvanized steel and aluminum can be coated with equal quality. After the items have been cleaned and painted, they pass through a bake oven which hardens and ages the finish so that they can be handled and used immediately.



The photos above and below show the system in operation. It's completely automated and geared for high capacity. The results are unbeatable.



A recent test conducted by an independent research laboratory, proved that metal coated with this process, withstood 120 hours of exposure to salt spray without corrosion! (Test on file)

For the finest in paint finish, ROHN-VULCAN products have it!





# TOWER TOPICS . . . from ROHN

*America's Foremost Name in Towers*

ROHN makes available the broadest line of tubing of any supplier in the industry. We supply it in three finishes . . .

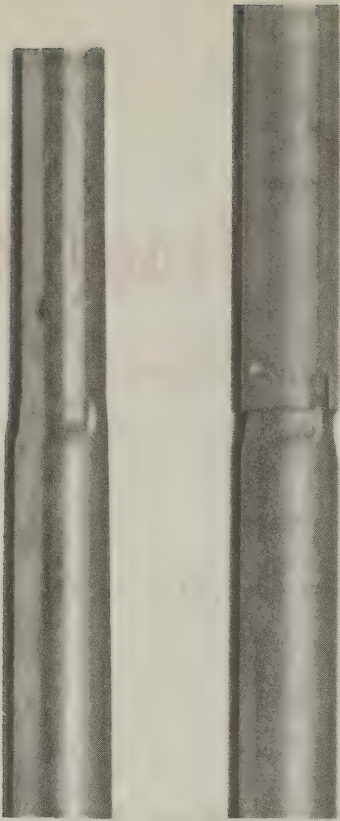
1. Galvanized after fabrication.
2. Pre-galvanized.
3. Gold enameled.

These three finishes are the finest available in their class and should be explained more fully.

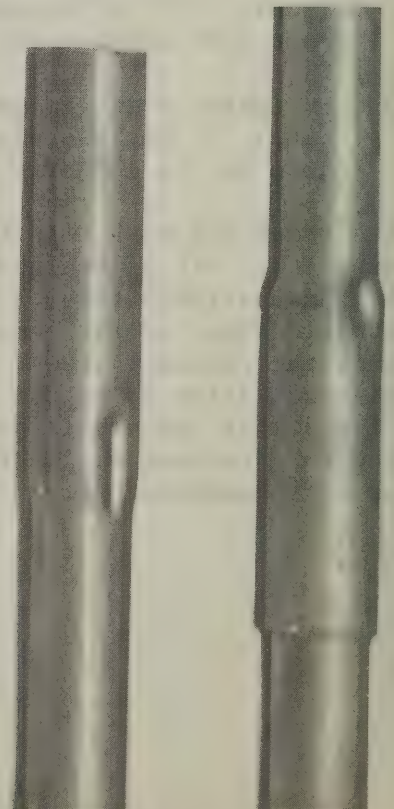
1. The galvanized after fabrication product is completely dipped after the tubing has been either expanded or swaged, and has no seams, holes, or edges whatsoever that are uncoated.
2. The pre-galvanized tubing is made from a coil of steel which is galvanized at the steel mill, cut into strips, and then formed into a piece of tubing. Where the tubing is welded, zinc is sprayed over the weld to give it protection at that point. It does, however, have a slightly uncoated seam on the inside and on the edges (ends). It is the most popular type of tubing sold today and is the type sold by most ROHN competitors.
3. Our gold tubing is made from black steel, the same as our galvanized after fabrication. It has a prime coat and a finish coat which gives it one of the best paint jobs in the industry today.

The other and most important consideration in tubing is whether to sell swaged or expanded. All of the ROHN swaged tubing is of the highest grade, highest strength tubing available today. It is the most economical and the strongest. Our expanded tubing is not of the same strength as the swaged, regardless of whether it is galvanized, pre-galvanized, or painted. It is not as strong, because the expanding process does not allow us to use the same type of steel as can be used in the swaging process. If you would give this point thoughtful consideration, you would realize this is one of the very reasons why we swage tower sections (#20 and #25), rather than expand them, as our competitors do.

**Strong . . . .**



**Weak . . . .**





# ROHN TUBING

with either expanded or swaged ends!

*Hot-Dipped  
Galvanized  
Interior and  
Exterior after  
Fabrication*

**NO UNCOATED SEAMS**

## HIGH STRENGTH

**MEANS EXTRA STRENGTH FOR  
STURDINESS!**

Made of highest quality **HIGH STRENGTH** steel, Rohn 18 gauge tubing meets strength specifications of competitive 16 gauge!

**COMPLETE SELECTION  
FOR EVERY NEED!**

Various lengths up to 10 feet; 16, 18, or 20 gauge and with either (1) expanded end with companion locking joint or (2) swaged (tapered) end to fit regular joint; also in optional Rohnkote (enameled) or pre-galvanized finish if desired.

ANOTHER "SUPERIOR-PROVED" PRODUCT FROM

## ROHN Manufacturing Co.

Box 2000, Peoria, Illinois

**FOR SPECIAL LENGTHS OR FURTHER DETAILS:**  
Contact Factory or Rohn Representative.



**EXPANDED END WITH  
LOCKING JOINT!**

Provides true, tight, and secure joint that affords maximum locking strength that can't slip! Depressed notch on expanded end locks into specially formed notch on tubing to be joined.



**SPECIAL 1/2" TAPERED  
(SWAGED) END WITH  
LOCKING JOINT!**

Permits tubing to join together tightly to form solid joint with another piece.

ROHN MAST TUBING

HOT-DIPPED GALVANIZED AFTER FABRICATION

(10 pcs. per bundle)

IMPORTANT: All ROHN hot-dipped galvanized tubing is completely galvanized after the tubing is formed and welded. "True hot-dip" galvanized tubing with no uncoated seams -- highest quality available! - 18 gauge swaged has the strength of most competitive 16 gauge.

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>
<p>1½" Tubing - Expanded End and Locking Joint "True Hot-Dip" Galvanized (05GLX)</p>			
161005GLX	1½" x 10' - 16 gauge - with expanded end and locking joint	6.20 ea	3.72 ea
181005GLX	1½" x 10' - 18 gauge - with expanded end and locking joint	5.45 ea	3.28 ea
160505GLX	1½" x 5' - 16 gauge - with expanded end and locking joint	3.35 ea	2.02 ea
180505GLX	1½" x 5' - 18 gauge - with expanded end and locking joint	3.05 ea	1.82 ea
<p>1½" Tubing - Expanded End and Locking Joint "True Hot-Dip" Galvanized (06GLX)</p>			
161006GLX	1½" x 10' - 16 gauge - with expanded end and locking joint	6.75 ea	4.05 ea
<p>1½" Tubing - Swaged End and Locking Joint "True Hot-Dip" Galvanized (05GHS)</p>			
161005GHS	1½" x 10' - 16 gauge - with swaged end and locking joint	5.45 ea	3.27 ea
181005GHS	1½" x 10' - 18 gauge - with swaged end and locking joint	4.80 ea	2.87 ea
160505GHS	1½" x 5' - 16 gauge - with swaged end and locking joint	2.90 ea	1.75 ea
180505GHS	1½" x 5' - 18 gauge - with swaged end and locking joint	2.70 ea	1.62 ea
<p>1½" Tubing - Plain End "True Hot-Dip" Galvanized (05GH)</p>			
141005GH	1½" x 10' - 14 gauge - with plain end	7.30 ea	4.38 ea
140505GH	1½" x 5' - 14 gauge - with plain end	3.95 ea	2.36 ea

Quantities may be mixed.

F.O.B. PEORIA, ILLINOIS - or - BIRMINGHAM, ALABAMA

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ROHN MAST TUBING

PRE-GALVANIZED MATERIAL

(10 pcs. per bundle)

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>
	1½" Tubing - Expanded End and Locking Joint Pre-Galvanized (05PLX)		
161005PLX	1½" x 10' - 16 gauge - with expanded end and locking joint	5.85 ea	3.50 ea
181005PLX	1½" x 10' - 18 gauge - with expanded end and locking joint	5.15 ea	3.08 ea
201005PLX	1½" x 10' - 20 gauge - with expanded end and locking joint	4.20 ea	2.53 ea
160505PLX	1½" x 5' - 16 gauge - with expanded end and locking joint	3.15 ea	1.90 ea
180505PLX	1½" x 5' - 18 gauge - with expanded end and locking joint	2.90 ea	1.73 ea
200505PLX	1½" x 5' - 20 gauge - with expanded end and locking joint	2.40 ea	1.43 ea
	1½" Tubing - Expanded End and Locking Joint Pre-Galvanized (06PLX)		
161006PLX	1½" x 10' - 16 gauge - with expanded end and locking joint	6.15 ea	3.70 ea
	1½" Tubing - Swaged End and Locking Joint Pre-Galvanized (05PHS)		
161005PHS	1½" x 10' - 16 gauge - with swaged end and locking joint	5.10 ea	3.05 ea
181005PHS	1½" x 10' - 18 gauge - with swaged end and locking joint	4.45 ea	2.68 ea
201005PHS	1½" x 10' - 20 gauge - with swaged end and locking joint	3.65 ea	2.18 ea
160505PHS	1½" x 5' - 16 gauge - with swaged end and locking joint	2.70 ea	1.63 ea
180505PHS	1½" x 5' - 18 gauge - with swaged end and locking joint	2.50 ea	1.50 ea
200505PHS	1½" x 5' - 20 gauge - with swaged end and locking joint	2.05 ea	1.23 ea
	1½" Tubing - Plain End Pre-Galvanized (05PH)		
161005PH	1½" x 10' - 16 gauge - with plain end	4.65 ea	2.80 ea
181005PH	1½" x 10' - 18 gauge - with plain end	4.05 ea	2.43 ea
	1½" Tubing - Plain End Pre-Galvanized (06PH)		
161006PH	1½" x 10' - 16 gauge - with plain end	5.50 ea	3.31 ea

Quantities may be mixed.

F.O.B. PEORIA, ILLINOIS - or - BIRMINGHAM, ALABAMA

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



ROHN MAST TUBING

GOLD ENAMELED

(10 pcs. per box)

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>
<p>1½" Tubing - Expanded End and Locking Joint Gold Enameled Steel Tubing Bonderized; Baked Zinc Prime Coat; Baked Gold Enamel Finish Coat (05ELX)</p>			
161005ELX	1½" x 10' - 16 gauge - with expanded end and locking joint	5.95 ea	3.58 ea
181005ELX	1½" x 10' - 18 gauge - with expanded end and locking joint	5.20 ea	3.13 ea
201005ELX	1½" x 10' - 20 gauge - with expanded end and locking joint	4.60 ea	2.75 ea
160505ELX	1½" x 5' - 16 gauge - with expanded end and locking joint	3.75 ea	2.25 ea
180505ELX	1½" x 5' - 18 gauge - with expanded end and locking joint	3.05 ea	1.83 ea
200505ELX	1½" x 5' - 20 gauge - with expanded end and locking joint	2.75 ea	1.65 ea
<p>1½" Tubing - Swaged End and Locking Joint Gold Enameled High Strength Steel Tubing Bonderized; Baked Zinc Prime Coat; Baked Gold Enamel Finish Coat (05EHS)</p>			
161005EHS	1½" x 10' - 16 gauge - with swaged end and locking joint	5.20 ea	3.12 ea
181005EHS	1½" x 10' - 18 gauge - with swaged end and locking joint	4.55 ea	2.73 ea
201005EHS	1½" x 10' - 20 gauge - with swaged end and locking joint	3.95 ea	2.38 ea
160505EHS	1½" x 5' - 16 gauge - with swaged end and locking joint	3.10 ea	1.87 ea
180505EHS	1½" x 5' - 18 gauge - with swaged end and locking joint	2.65 ea	1.60 ea
200505EHS	1½" x 5' - 20 gauge - with swaged end and locking joint	2.40 ea	1.45 ea

Quantities may be mixed.

F.O.B. PEORIA, ILLINOIS - or - BIRMINGHAM, ALABAMA

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



# ROHN No. 25 Tower

General-Purpose  
Communication or  
Heavy-Duty TV Tower

R

## HOT DIPPED GALVANIZED

ROHN superior engineering means *advanced* design—this results in the **BEST** tower for the needs of today! The No. 25 represents the ultimate of *all* towers of this type as it even further advances the already famous ROHN line. This is proved because here is a tower at least 33% *stronger* and more durable than similar sized and similar type towers found on the market today. At the same time, the ROHN production system means lower costs—giving you a tower *actually costing LESS* than inferior towers. So why not get the best—ROHN. Study the No. 25 carefully and you'll agree.

*These Outstanding Features Make* **ROHN No. 25** *the* **BEST of any TOWER!**

### • UNEQUALLED STURDINESS—

Extra heavy-duty heavy gauge steel tubing of 1¼" used for side rails, resulting in far greater *strength* and sturdiness than ordinarily found in this size tower.

The strength of the No. 25 allows it to be self-supporting provided a house bracket is used. Tower can go 35 feet above such bracket under normal conditions. (See instruction sheet.) Under most guyed conditions the No. 25 is suit-

able to heights of 200 feet! The engineering department suggests you inquire regarding special antenna or conditions for complete recommendations of using the No. 25 *as it will satisfy a tremendously wide range of tower needs.*

### • PROVEN DESIGN—

Uses a 12½" equilateral triangular design with *solid steel* "zig-zag" cross-pieces entirely *electric welded* and fabricated by *precision* machines. The No. 25 has 8 "zig-zag" step per 10' section for more than usual strength.

### • FINEST OF FINISHES—

Available in famous ROHN Hot Dipped zinc galvanized permanent finish—the most durable coating ever known. Forever rust-proofs and gives an always attractive appearance. Every inch, including inside of entire tower, evenly and completely covered with zinc fused to the steel *after* fabrication.

◀ No. 25 uses ROHN double-bolted joint — proved the **BEST** way to join tower sections together for sturdiness and dependability.

### • SUPERIOR STRENGTH—

*Superior* strength has always been *foremost* in ROHN towers. This *is achieved* by *setting rigid high standards for the steel used.* These standards are constantly *maintained* by scientific testing according to accepted laboratory procedures so *quality never varies!* It's a natural conclusion that when *quality* ingredients are combined with *precision* manufacture and *proven* design the result is a **BETTER** product!

**NOTE:** *Assembly bolts and nuts are located within 1 leg of each tower section.*

**TO ORDER SEE REVERSE SIDE**

Designed and Manufactured Exclusively By —

**ROHN Manufacturing Co**

Peoria, Illinois

#25 TOWER

PART NO.		LIST	SUGG'D. DEALER	WT.
25G	10' tower section	34.45	24.10	40
25AG	9' top section	36.80	25.75	31
<u>/N</u> ST25AG	Short top section, 5'	23.95	16.75	18
25AG-1	Top section. Mast support tube is 1½" galv. pipe, threaded on top and projecting 12" above apex of side rails.	40.25	28.15	31
25AG-2	Top section. Mast support tube is 2½" O.D. tubing, 36" total length, extending 18" above apex of side rails.	40.25	28.15	31
25AG-3	Top section. Mast support tube is 2½" O.D. tubing, extending 12" above apex of side rails. A 2" O.D. antenna stub will fit snugly inside support tube.	40.25	28.15	31
25AG-4	8' top section. Upper end terminates in 11" dia. flat, circular plate with 2½" dia. hole in center.	40.25	28.15	31
25AG-5	Top section. Mast support tube is 2-3/4" O.D. and 2-9/16" I.D. tubing, 18" total length.	40.25	28.15	31
25TG	10' tapered base section	58.25	40.75	60
25RG	10' insulator section for 25G tower (includes 3 #10470 post insulators)	153.10	107.15	74
APL25G	Beacon plate	22.45	15.70	14
SB25G	3'4" short base section for concrete	15.85	11.10	10
SB25G-5	5' short base section for concrete	22.45	15.70	20
SBH25G	3'4" hinged short base section for concrete	20.15	14.10	14
HGB25G	3' hinged ground base (for use without concrete)	25.20	17.65	27
SDB25G	Single drive base	17.60	12.30	20
BPC25G	Concrete base plate	29.20	20.45	30
3/4"x12" PP	Pier pin (for BPC25G or 25TG - 1 required)	2.50	1.75	1
BPH25G	Hinged base plate for concrete	38.15	26.70	21
1/2"x12" BB	Concrete base bolt w/double nuts (for BPH25G - 4 required)	2.15	1.50	½
FR25G	Flat roof mount	29.60	20.70	24
PR25G	Peak roof mount	37.35	26.15	14
BP25G	Base plate (for drive-in base)	10.15	7.10	9
DR25G	3'4" drive rods (set of 3)	11.20	7.85	12
DT25	Drive tool	6.70	4.70	1
RP25G	Rotor post	3.35	2.35	3
RP25G-CM	Rotor post	3.35	2.35	2
AS25G	Accessory shelf. Triangular plate for mounting Ham "M" rotor or mast bearing. Mounts inside of tower.	14.80	10.35	4
GA25G	Guy assembly (bracket w/torque bars)	15.70	11.00	10
GB25G	Guy bracket only	10.15	7.10	7
HB25AG	Adjustable house bracket (up to 15")	9.00	6.30	8
HB25BG	Adjustable house bracket (15" to 24")	11.20	7.85	12
HB25CG	Adjustable house bracket (24" to 36")	14.60	10.20	17
EB2515G	Eave bracket (15")	5.95	4.15	5
EB2524G	Eave bracket (24")	6.70	4.70	6
EB2525G	Eave bracket (universal)	8.50	5.95	7
TB50	Tower bushing - 1½" I.D. x 2" O.D.	1.60	1.10	½
TB75	Tower bushing - 1½" I.D. x 2" O.D.	1.60	1.10	½
S-1	Rubber grommet (1 pc.)			
L-2	Rubber grommet (2 pcs.)			
<u>/N</u> AB	Amateur bearing - 2"x4"x10" hardware for use with 25AG-4 top	5.65	3.95	1
TB-2	Thrust bearing, ball bearing, self-aligning, for 2" O.D. tubing, bolts to 25AG-4 top	23.60	16.50	8
UHF25G	Side arm mount for UHF & FM antennas	5.50	3.85	4
SAB25G-2	Side arm bracket for top antenna mounting alongside beacon	28.85	20.20	17
SA25G-224	24" side arm with 36", 2½" O.D. support tube	45.25	31.65	22
SA25G-524	24" side arm with 18", 2-9/16" I.D. support tube	45.25	31.65	18
SA25G-67	67" side arm, 1½" I.D. support tube, for mounting TV receiving antennas (not recommended and must be guyed to resist twist)	45.25	31.65	25
TA25	Torque arm stabilizer assembly	44.95	31.45	35
25TDM-2	Top dish mount w/2" O.D. mast	42.35	29.65	34
25TDM-25	Top dish mount w/2½" O.D. mast	53.50	37.45	43
25TDM-2SP	Top dish mount w/2" standard pipe	55.15	38.60	44
25TDM-2EH	Top dish mount w/2" EH pipe	66.10	46.25	53
25TDM-25SP	Top dish mount w/2½" standard pipe	72.35	50.65	58
DM25G-2	Face dish mount w/2" (2-3/8" OD) 5' long standard pipe	51.85	36.30	42
<u>/N</u> WP25G	Work platform	22.75	15.95	10
EF-25-45	Aluminum erection fixture, 12 ft. long (fits all models with 1½" side rails)	101.10	70.75	18
P-25-45	Pole only for EF-25-45	56.15	39.30	10
H-25-45	Head only for EF-25-45	56.15	39.30	8

/N New Item.

NOTE: The price on #25 sections will be \$5.50 higher on shipments to the following states: Ariz., Calif., Colo., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo., Alaska, Hawaii, and Alberta, B.C., and Sask., Canada.

F.O.B. PEORIA, ILLINOIS - or - BIRMINGHAM, ALABAMA  
PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



#25G

Reference Sheet for Complete Guyed #25G Tower

DEALER PRICES

<u>TOWER HEIGHT</u>	<u>30 lbs./sq.ft. WIND LOAD</u>	<u>40 lbs./sq.ft. WIND LOAD</u>	<u>50 lbs./sq.ft. WIND LOAD</u>
40'	216.00	216.00	216.00
50'	245.00	245.00	270.00
60'	273.00	276.00	307.00
70'	300.00	337.00	337.00
80'	367.00	367.00	412.00
90'	395.00	395.00	442.00
100'	431.00	474.00	541.00
110'	508.00	508.00	548.00
120'	538.00	538.00	585.00
130'	568.00	616.00	663.00
140'	601.00	649.00	694.00
150'	686.00	686.00	841.00
160'	764.00	811.00	
170'	780.00	827.00	
180'	856.00	856.00	
190'	893.00		
200'	927.00		

Above prices include all items listed on parts list sheets.

"Ground" or "roof" towers same price. When ordering, specify "roof" or "ground". See guy chart and parts list for details.

Prices for above towers are subject to change based upon current individual item prices. Prices subject to change without notice.

Anchor grounding (AGK) and base grounding (BGK) of all towers are recommended by E.I.A. and Rohn Manufacturing Co. However, grounding is not included in tower prices. See appropriate price list for grounding prices.

Above prices apply to shipments East of the Rocky Mountains. For shipments West of the Rockies, add \$4.00 per 10 ft. of tower height.

F.O.B. PEORIA, ILLINOIS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

REFERENCE PRICES & INSTALLATION INFORMATION  
#25 Bracketed Towers, NON-GUYED

BASE: The size of the concrete base for a 50' #25 tower, with a house bracket 12' above-ground, is 3' deep by 18" square. For cases of loose soil, etc., the base must be larger. Spread about 2" of gravel in bottom of hole prior to setting base section. After setting base section on gravel, being sure correct end is up, fill another 3" with gravel around legs of base. This allows the tower base legs to extend the required amount below the base of the concrete, thus allowing for drainage of moisture into the gravel. Level the base section as much as possible prior to pouring concrete and repeat the process to make the tower plumb, after pouring concrete. Do not pull base up into the concrete to level it and do not drive it hard into ground, as this plugs leg holes and prevents moisture drainage. Crown the top of the concrete slightly to prevent water accumulation.

HEIGHT OF TOWER & BRACKET USES: House brackets must be used and must be mounted at least 12' aboveground to be effective. The #25 tower should not extend more than 33' above a house bracket. To secure the house bracket, use lag screws no smaller than 3/8" x 2". A special effort should be made to locate the house bracket such that the lag screws go through the siding into a stud. Brackets fastened to the siding only will not hold in a high wind. Tighten the house bracket U-bolts only enough to prevent looseness. Do not dent or flatten the tower upright members by excessively tightening U-bolts.

BOLTS: Installers are urged to use a 10" lining-up punch that tapers from about 1/2" to 5/32" diameter over a 6 1/2" length. If bolts cannot be pushed through the holes with the heel of the hand while rocking the tower, do not hammer them through. Carefully drive the punch into the hole just enough to slightly enlarge it. The leg bolt hole should be just large enough to admit the bolt. Never drill out the holes. Be sure to tighten all leg bolts until they partially flatten the sleeves, causing the sleeves to actually grip the legs inside. Always replace stripped bolts. Upon completing an installation, there should be no vertical movement between tower sections at the joints when the tower is deliberately swayed from side to side.

MISCELLANEOUS: Installation is greatly hastened and simplified by the use of an erection fixture.

All information is based upon antennas with not more than 2 square feet of area, in 20 PSF (70 MPH) wind load and a safety factor, with antenna installed at tower apex.

See Chart B-691119 for more information on non-guyed towers.

DEALER REFERENCE PRICES FOR COMPLETE BRACKETED TOWERS

	30'	40'	50'	60'	70'	80'
#25G	80.00	103.00	126.00	149.00	172.00	195.00

Includes top section (A-2), 15" to 24" adjustable house bracket, and required number of standard sections. Prices for above towers are subject to change without notice based upon current individual item prices.

Above prices apply to shipments East of the Rocky Mountain states. For shipments West of the Rocky Mountain states, add \$4.00 per 10 ft. of tower height.

F.O.B. PEORIA, ILLINOIS

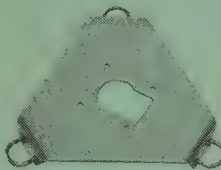
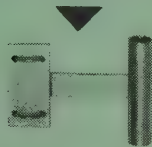
PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



# ROHN TOWER ACCESSORIES

®

RP 25G-CM  
SPECIAL ROTOR POST



AS 25G



GA 25G  
GUY ASSEMBLY with torque bars  
GB 25G GUY BRACKET ONLY  
without torque bars

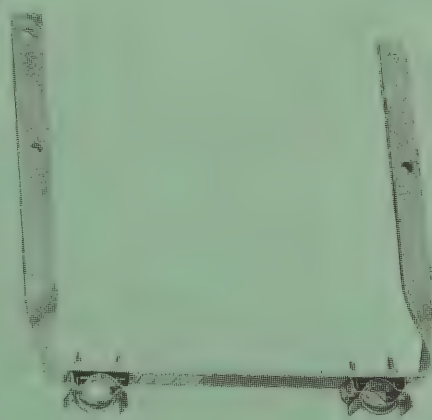
RP 25G  
ROTOR POST

AS 25G ACCESSORY SHELF  
for rotor mounting

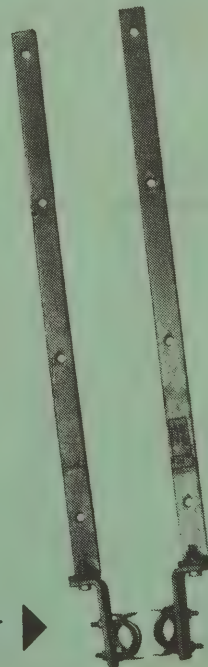
AS 25G on 25AG Top Section  
with Hy Gain Model 400 Rotor



HB 25AG 0-15"  
HB 25BG 15"-24" (not shown)  
HB 25CG 24"-36" (not shown)  
ADJUSTABLE HOUSE BRACKET



EB 2515G 15"  
EB 2524G 24" (not shown)  
EAVE BRACKET



EB 2525G UNIVERSAL EAVE BRACKET

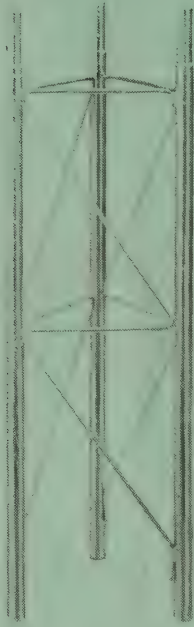
**ROHN** **MANUFACTURING CO.**

®

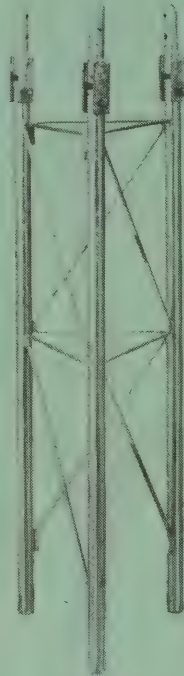
P. O. BOX 2000  
PEORIA, ILLINOIS 61601



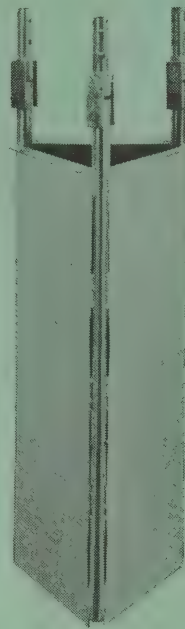
# ROHN<sup>®</sup> TOWER ACCESSORIES



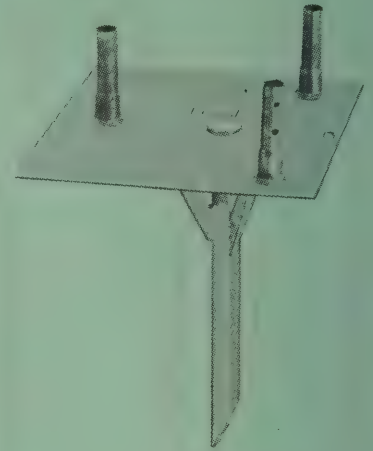
**SB 25G**  
3'4" SHORT BASE  
section for concrete



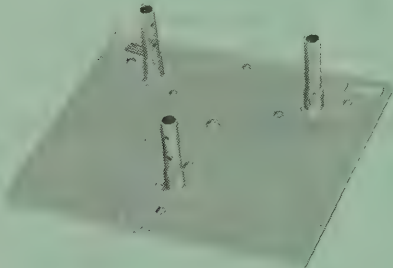
**SBH 25G\***  
3'4" HINGED SHORT BASE  
section for concrete



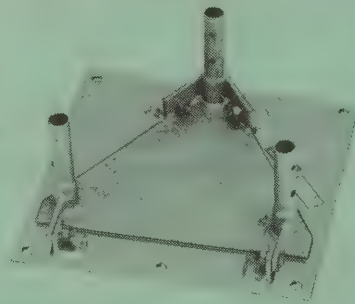
**HGB 25G\***  
3' HINGED GROUND BASE  
(use without concrete)



**SDB 25G\***  
SINGLE DRIVE in base



**BPC 25G\***  
CONCRETE BASE PLATE



**BPH 25G\***  
HINGED BASE PLATE for concrete

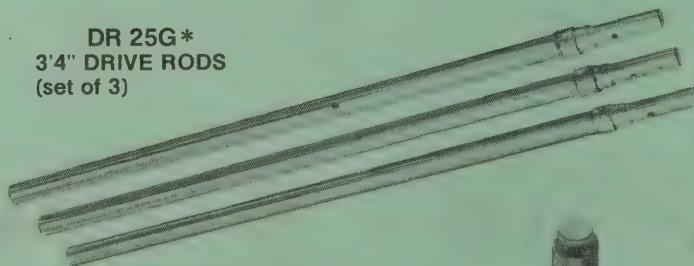


**FR 25G\***  
FLAT ROOF MOUNT

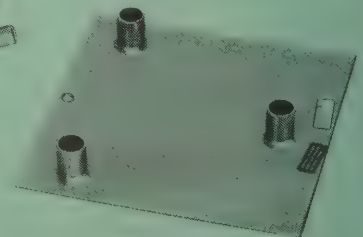


**PR 25G\***  
PEAK ROOF MOUNT

**DR 25G\***  
3'4" DRIVE RODS  
(set of 3)



**DT 25**  
DRIVE TOOL for DR 25G



**BP 25G\***  
BASE PLATE (for drive-in base)

*\*NOTE: Towers mounted on this base  
must be bracketed or guyed.*

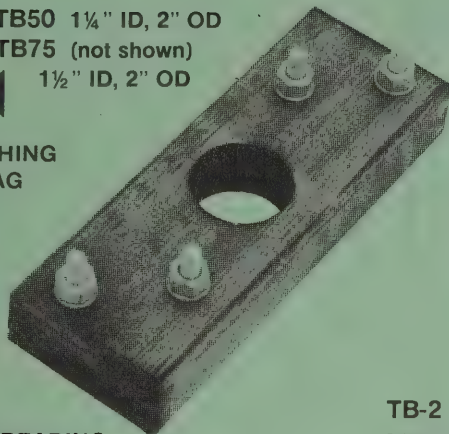
**ROHN<sup>®</sup> MANUFACTURING CO.**  
P. O. BOX 2000  
PEORIA, ILLINOIS 61601

# ROHN TOWER ACCESSORIES

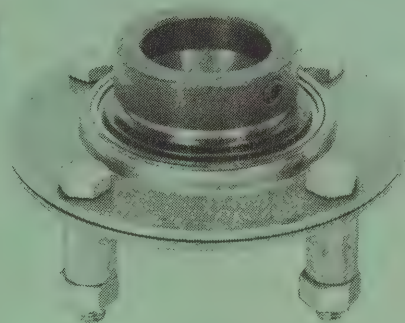


TB50 1 1/4" ID, 2" OD  
TB75 (not shown)  
1 1/2" ID, 2" OD

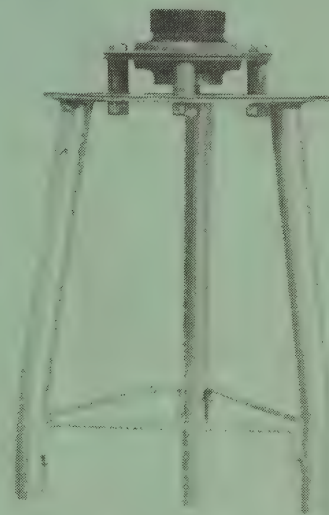
**TOWER BUSHING**  
for use in 20AG  
25AG  
Top Section



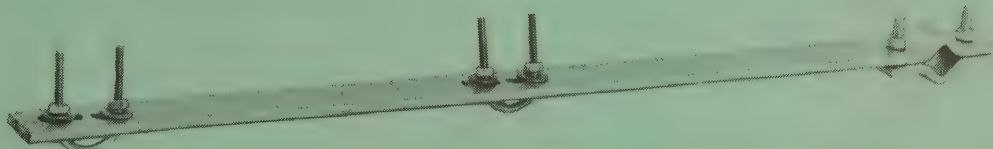
**AB**  
**HARDWOOD BEARING**  
for use on 25AG-4  
Top Section  
for 2" OD tubing



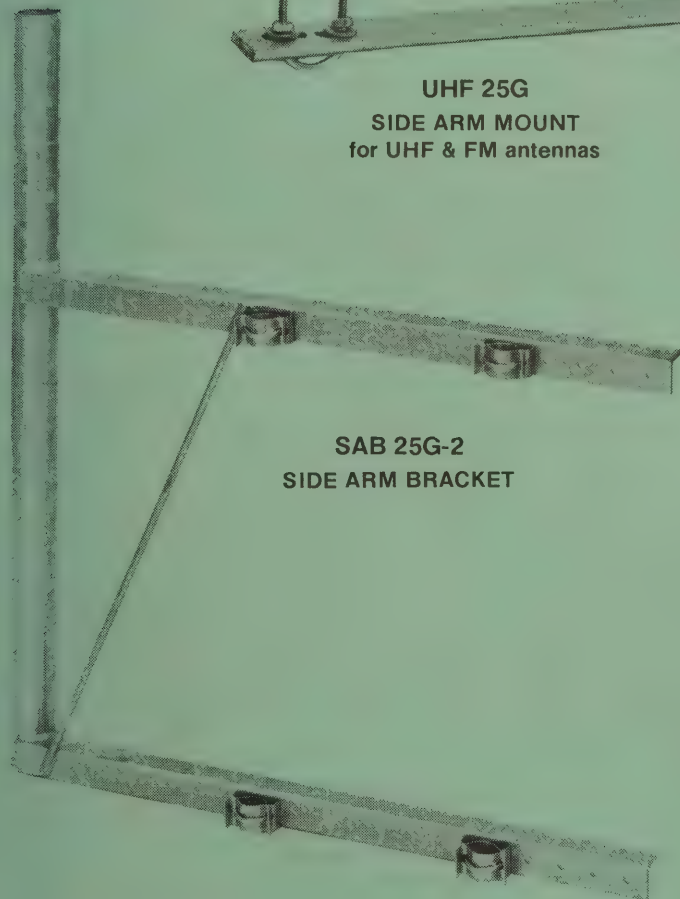
**TB-2**  
**THRUST BEARING**  
Ball bearing, self aligning for 2" OD  
tubing on 25AG-4 Top Section



TB2 on 25AG-4



**UHF 25G**  
**SIDE ARM MOUNT**  
for UHF & FM antennas



**SAB 25G-2**  
**SIDE ARM BRACKET**

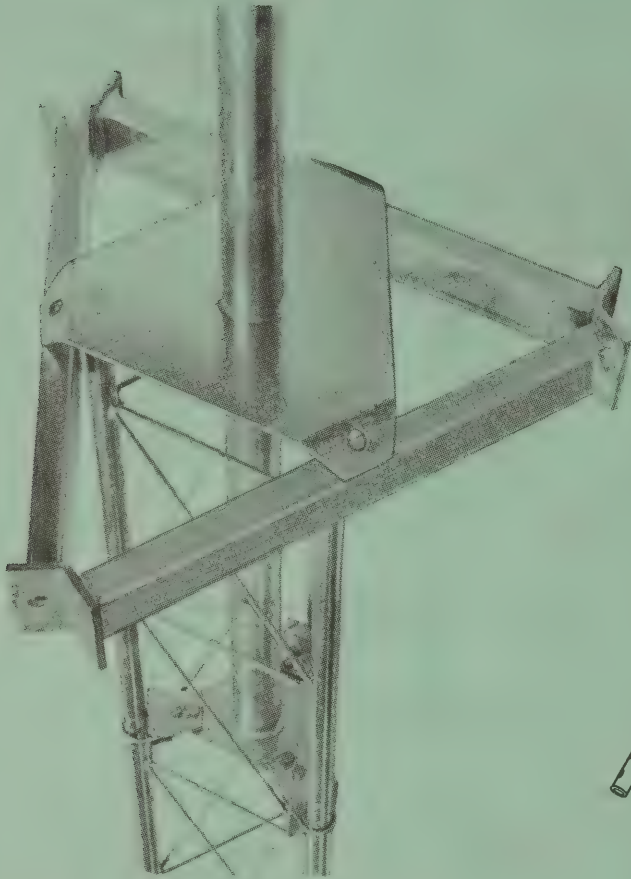


**SA 25G-224**  
**SA 25G-524 (not shown)**  
**24" SIDE ARM**

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PEORIA, ILLINOIS 61601

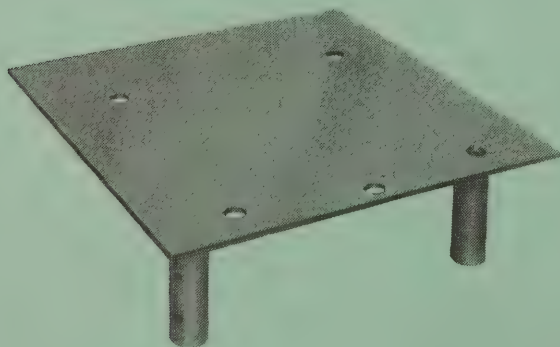


# ROHN TOWER ACCESSORIES

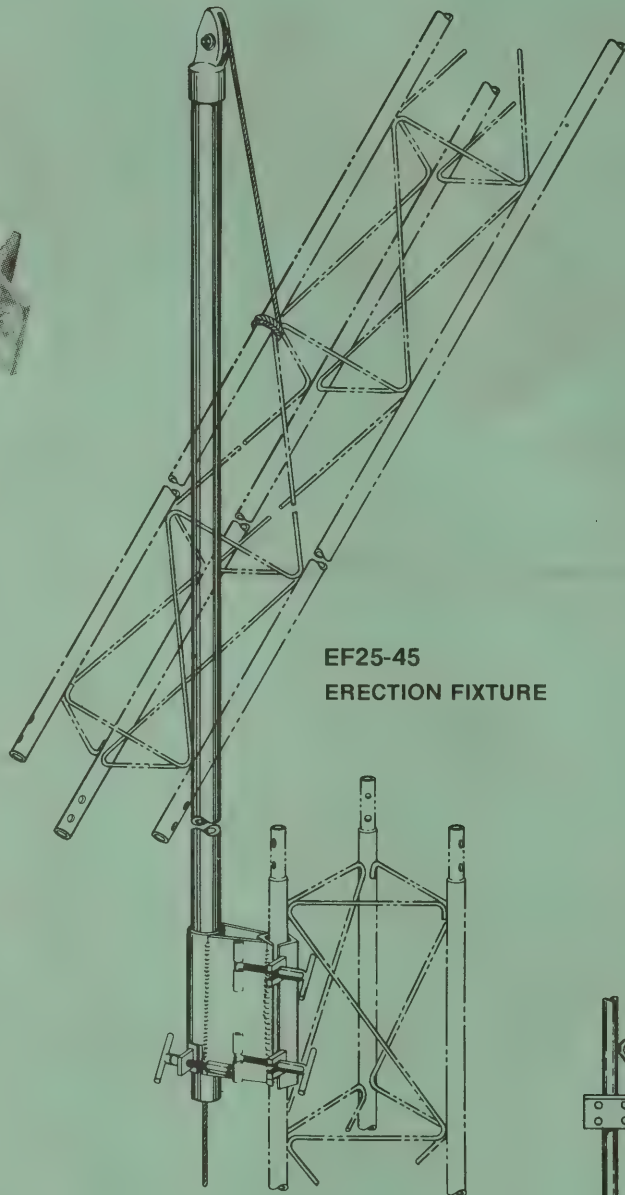


TA 25  
25TDM-2

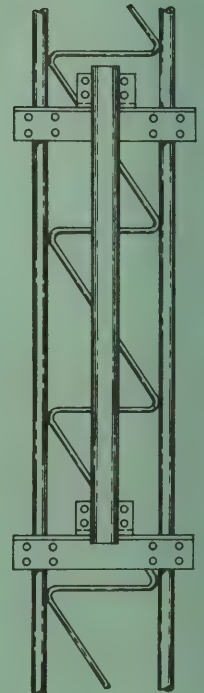
TORQUE ARM STABILIZER ASSEMBLY and TOP DISH MOUNT, (see drawing Page C-670315R for various sizes and assembly)



APL 25G  
TOP BEACON PLATE



EF25-45  
ERECTION FIXTURE



DM25G-2,  
FACE DISH MOUNT  
for 4 foot grid dish  
maximum

**ROHN** <sup>®</sup> **MANUFACTURING CO.**  
P. O. BOX 2000  
PEORIA, ILLINOIS 61601





WP25G

ANOTHER FIRST FROM ROHN

## TOWER WORK PLATFORM for Model 20G & 25G Towers

Take the aching feet out of tower work  
with this new Tower Work Platform.

Designed and manufactured according to Rohn high quality standards, this **one piece** platform provides a completely safe and stable "floor" for all your tower work. Just swing it around and it locks in place **anywhere** on the Model 20G & 25G towers. No pins, chains or bolts to loose or adjust. The heavy duty expanded metal floor is self-cleaning with a non-slip surface approximately 1 ft. square . . . plenty of room for comfortable working yet light and easy to handle. Like other Rohn quality products this WORK PLATFORM is Hot Dipped Galvanized for long life and neat appearance.

simple  
as  
1-2-3

Place one "corner" of platform against  
Tower leg with upper support inside  
the Tower as shown

then pivot other "corner" around and  
drop straight down to lock in position.

**ROHN**® **MANUFACTURING**

DIVISION OF



P.O. BOX 2000 • PEORIA, ILL. 61601

FORM NO. 71138

PRINTED IN U.S.A.

TOWER WORK PLATFORM

FOR 20G AND 25G TOWERS

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
WP25G	Work platform	22.75	15.95	10

F.O.B. PEORIA, ILLINOIS - or - BIRMINGHAM, ALABAMA

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

# TOWER SPECIFICATIONS

DISTANCE BETWEEN SIDE RAILS (CENTER TO CENTER)	11 1/4"
OVERALL LENGTH OF SECTION	10'-0"
WEIGHT PER SECTION	40 LBS.
SIDE RAIL DIAMETER AND GAUGE	1 1/4" O.D. 16 GA.
CROSS SECTIONAL AREA - ONE LEG	.2420 Sq. IN.
GROSS ALLOWABLE VERTICAL LOAD ON THE BOTTOM TOWER SECTION	15,540 LBS.
MAXIMUM ALLOWABLE AXIAL COMPRESSION OF THE CROSS SECTION OF ONE SIDE RAIL	5,180 LBS.
MEASURED TENSILE STRENGTH OF ONE SIDE RAIL	16,120 LBS.
MEASURED TENSILE STRENGTH OF ONE BOLTED LEG JOINT	13,280 LBS.
MAXIMUM ALLOWABLE TENSION IN EACH BOLTED LEG JOINT	5,310 LBS.
SAFE MOMENT OF RESTRAINT	4,210 FT.-LBS.
L - UNBRACED LENGTH OF SIDE RAIL (DISTANCE BETWEEN CROSSPIECES)	15 3/4"
R - RADIUS OF GYRATION OF SIDE RAIL	.420"
L/R FOR MAIN LEG MEMBER	37.5
WIND LOAD PER LINEAL FOOT OF TOWER AT THE HORIZONTAL WIND PRESSURES (PER SQUARE FOOT OF FLAT SURFACE)	
LISTED BELOW:	
30 LBS	7.62
40 LBS	10.16
50 LBS	12.70

3 - 1/4" DIA. X 1 1/2" LG., NF BOLTS  
3 - 5/16" DIA. X 1 1/2" LG., NF BOLTS

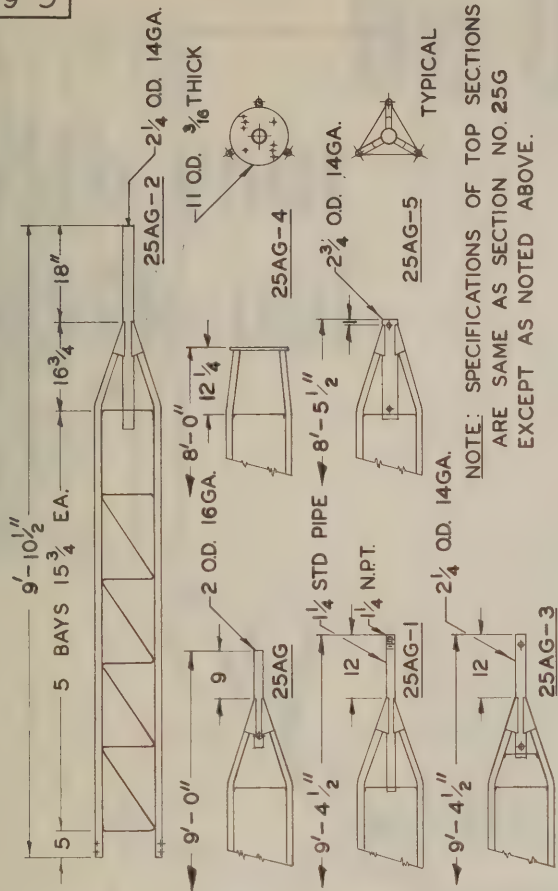
NO. 25G SECTION  
SCALE 1 1/2"=1'

REVISED 4-20-67

DRAWN <i>R.M.</i>	CUSTOMER	TITLE
CHECKED <i>DBR</i>		MODEL 25 TOWER SECTION
APPROVED <i>Duk.</i>		DRAWING NO.
DATE 6-25-63	ROHN MANUFACTURING Co. PEORIA, ILLINOIS	C-630625-R
SCALE NOTED		

NOTE: ALL DIMENSIONS IN INCHES EXCEPT AS NOTED

C-630625

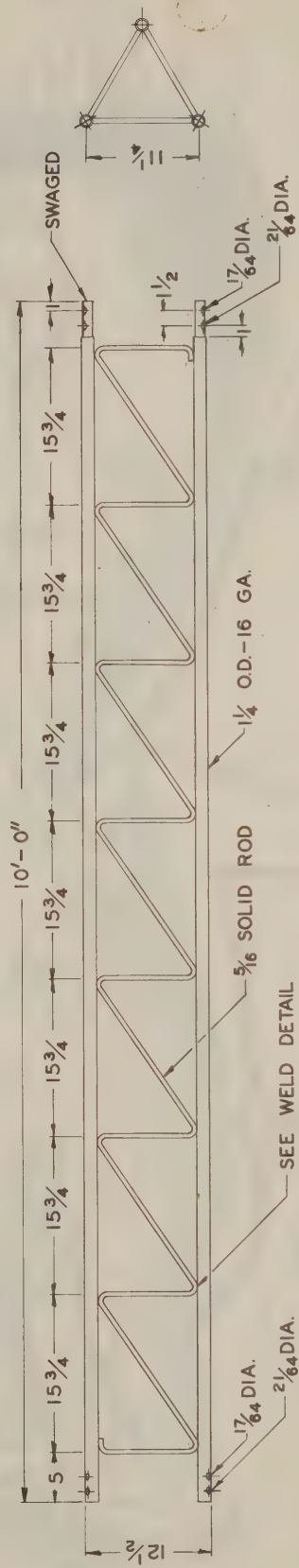


STANDARD TOP SECTIONS

SCALE 3/4"=1'

WELD DETAIL

SCALE 3"=1'



SEE WELD DETAIL





# BE CAREFUL.

with your  
crank-up!



**DON'T TAKE  
ANY CHANCES!**

**Crank-up  
towers  
can be  
dangerous.**

**ROHN** <sup>®</sup> **MANUFACTURING**

DIVISION OF



P. O. BOX 2000  
PEORIA, ILLINOIS 61601

CAUTION

CAUTION

CAUTION

Rohn Manufacturing assumes no responsibility on the use of any of its crank-up towers. Damage in shipment or mishandling can cause bent braces or binding of the tower sections. During raising, these bent braces and/or binding can cause overloads on the cable and, in some cases, cause cable failure.

Inspect your tower very carefully and the first few times you crank it up, BE SURE that the cable does not bind at any place or interfere with any of the braces. This is especially true on the No. 6 type crank-up. A bent brace can cause two braces to act as a very good wire cutter.

Inspect your tower very carefully before using it to make sure it works properly. ROHN cannot assume any responsibility after any crank-up tower leaves its plant.

All crank-up towers can be dangerous and should be operated with extreme care.

Careful inspection of all parts should be made before and after each time the tower is used.



# **\*NOTICE** *for* **CRANK-UP TOWERS**

ROHN does not recommend the use of crank-up towers.

This product is made available only due to the demand by experimenters, and should be used for experimenting only.

Crank-up towers can be dangerous and should be operated with extreme care.

Anyone who wishes to purchase this product must do so at his own risk and take all responsibility for any misfortunes in the operation of any ROHN crank-up tower.

ROHN has available much better and safer towers for permanent installations at much lower prices.

In most cases, it is impossible to get crank-up towers approved by cities and counties because they will not meet their engineering or safety codes, due to flexible joints, excentricities, and unstable column support.

**ROHN** <sup>®</sup> **MANUFACTURING**

DIVISION OF



P. O. BOX 2000  
PEORIA, ILLINOIS 61601



ROHN CRANK-UP MAST

Hot-Dipped Galvanized After Fabrication

PART NO.

R-50G      20' (8½") tower and winch (#6805) with cable for cranking up 21' (1½") mast. Automatic locking feature allows positive lock and release at any height for mast. Mast can be lowered without climbing. 21' mast will accommodate additional 1½" tubing with positive locking mast clamp.

Price includes following accessories, in addition to tower, winch, and 21' mast.

- 1 - 9', 1½" mast tubing (plain end)
- 1 - 1½" guy ring
- 1 - 1½" mast clamp
- 1 - Hinge base
- 1 - House bracket, 4" clearance (HBR-50G)
- 5 - 1½" twist-on stand-offs (3TS1½-U)
- 5 - 1" twist-on stand-offs (3TS1-U)
- 3 - 1½" twist-on stand-offs (3TS1½-U)

GP-50G      Ground post for R-50G, including winch (#6805) and cable

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
R-50G	Crank-up mast (per above)	123.50	86.50	120
GP-50G	Ground post (per above)	71.50	50.00	80
* HB25AG	Adjustable house bracket (up to 15")	9.00	6.30	8
* HB25BG	Adjustable house bracket (15" to 24")	11.20	7.85	12
* HB25CG	Adjustable house bracket (24" to 36")	14.60	10.20	17

\* These brackets available at extra cost to increase distance from house. V portion of HBR-50G bolts to standard 25G house bracket.

F.O.B. PEORIA, ILLINOIS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



BILL OF MATERIALS

ITEM	QUANTITY	DESCRIPTION
1	1	TOWER SECTION, 20' LG.
2	1	1 1/2" O.D. MAST, 21' LG.
3	1	1 1/2" O.D. MAST, 5' LG.
4	1	GROUND POST ASSY (WINCH, CABLE, CABLE CLAMP, PIN)
5	1	HINGE BASE W/ PIN & COTTER KEY
6	1	HOUSE BRACKET HBR 50G W/ 4" CLEARANCE
7	1	MAST LOCK ASSEMBLY
8	1	MAST CLAMP - 1 1/2"
9	1	1/4" GUY RING
10	16	RELEASE CABLE
11	30	WINCH CABLE
12	1	600S WINCH
13	2	3/8" x 1 1/4" BOLT ASSY (FOR WINCH ATT)
14	2	1/2" x 1 1/2" (UPPER HINGE ATT)
15	5	1/2" TWIST-ON STAND-OFFS (3TS1 1/2-U)
16	5	1" TWIST-ON STAND-OFFS (3TS1-U)
17	3	1 1/4" TWIST-ON STAND-OFFS (3TS1 1/4-U)
18	1	HB 25AG (UP TO 15")
19	1	HB 25BG (15" TO 24")
20	1	HB 25CG (24" TO 36")

\* OPTIONAL ITEM \*GP-50 G - MUST BE ORDERED SEPARATELY.

\*\* OPTIONAL BRACKETS AVAILABLE FOR DISTANCES GREATER THAN 4" FROM HOUSE.

- 1- REMOVE ALL SHIPPING BANDS FROM TOWER. REMOVE MAST CLAMP FROM BENEATH TOP PLATE AND INSTALL AT TOP OF 1 1/2" MAST. INSTALL GUY RING AND ATTACH GUY.
- 2- ATTACH WINCH TO WINCH CABLE FROM BOTTOM OF PROVIDED RUN WINCH CABLE FROM BOTTOM OF 1 1/2" O.D. MAST UP THROUGH INSIDE OF TOWER THROUGH GUIDE HOLE IN SECONDARY PLATE, AROUND PULLEY, AND DOWN TO WINCH ALONG OUTSIDE OF TOWER.
- 3- ATTACH RELEASE CABLE TO LOCKING DEVICE ON SECONDARY PLATE, RUN IT ALONG OUTSIDE OF TOWER, AND WRAP AROUND TOWER LEG NEAR BASE OF TOWER.

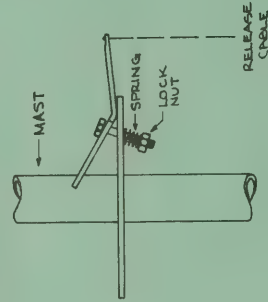
4B- INSTALL HINGE BASE ON CONCRETE SLAB TO PREVENT SETTLING. ATTACH ANTENNA, STAND TOWER UP AND ATTACH TO HOUSE WITH LEAVE BRACKET.

5B- RAISE MAST TO DESIRED HEIGHT BY CRANKING WINCH.

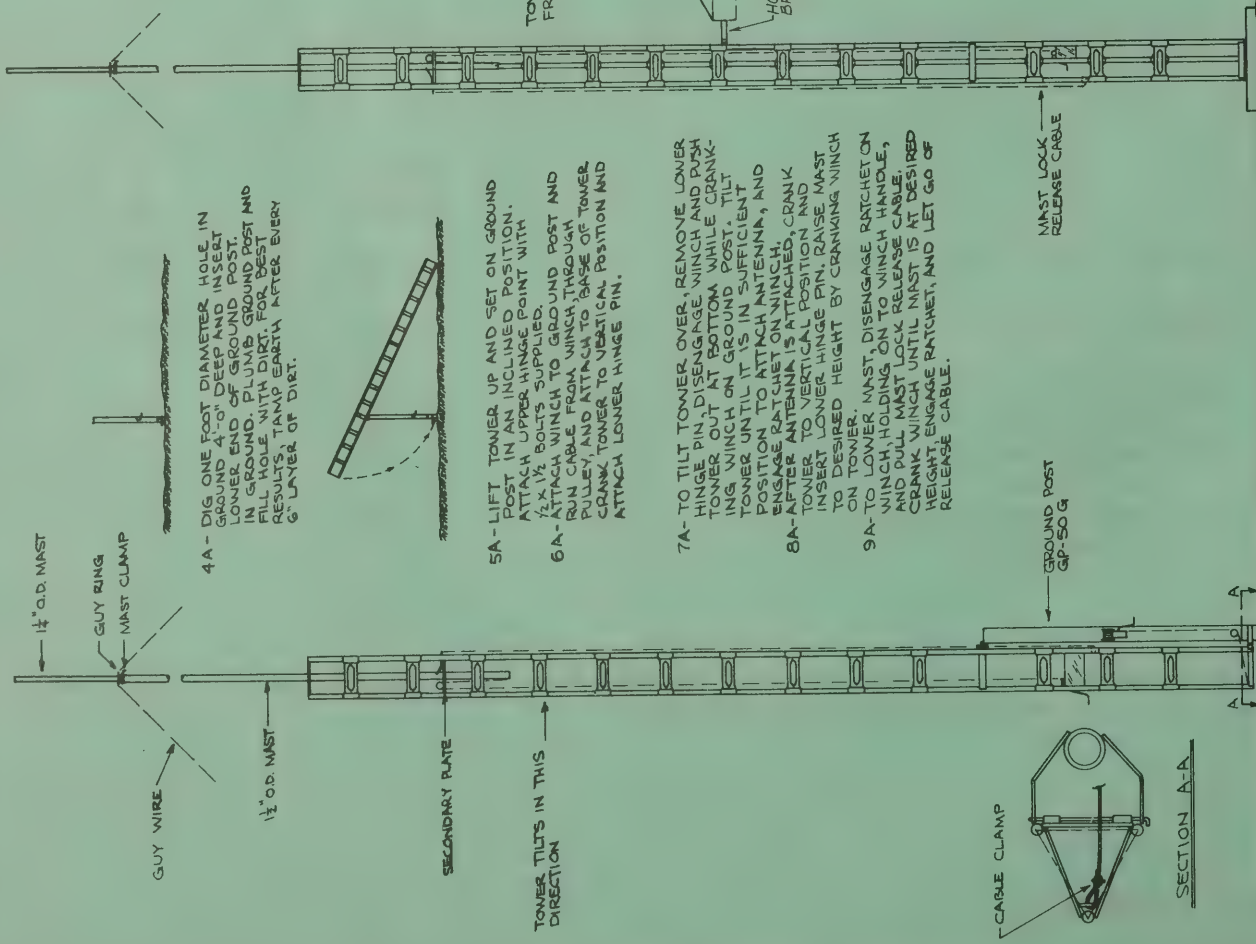
6B- TO LOWER MAST, DISENGAGE RATCHET ON WINCH, HOLDING ON TO WINCH HANDLE, AND PULL MAST LOCK RELEASE CABLE. CRANK WINCH UNTIL MAST IS AT DESIRED HEIGHT, ENGAGE RATCHET, AND LET GO OF RELEASE CABLE.

7B- THE "V" PORTION (WK. NO. HBC50G) OF STANDARD HBR 50G WILL FIT TO ITEMS 18, 19 OR 20 BRACKETS WHEN DISTANCE GREATER THAN 4" FROM HOUSE IS REQUIRED.

MAST LOCKING DEVICE



TOWER TILTS OUT FROM PAGE.



4A- DIG ONE FOOT DIAMETER HOLE IN GROUND 4'-0" DEEP AND INSERT LOWER END OF GROUND POST. FILL HOLE WITH DIRT. FOR BEST RESULTS, TAMP EARTH AFTER EVERY 6" LAYER OF DIRT.

5A- LIFT TOWER UP AND SET ON GROUND POST IN AN INCLINED POSITION. ATTACH UPPER HINGE POINT WITH 1/2" x 1 1/2" BOLTS SUPPLIED.

6A- ATTACH WINCH TO GROUND POST AND RUN CABLE FROM WINCH THROUGH PULLEY AND ATTACH TO BASE OF TOWER. CRANK TOWER TO VERTICAL POSITION AND ATTACH LOWER HINGE PIN.

7A- TO TILT TOWER OVER, REMOVE LOWER HINGE PIN, DISENGAGE WINCH AND PUSH TOWER OUT AT BOTTOM WHILE CRANKING WINCH ON GROUND POST. TILT TOWER UNTIL IT IS IN SUFFICIENT POSITION TO ATTACH ANTENNA, AND ENGAGE RATCHET ON WINCH.

8A- AFTER ANTENNA IS ATTACHED, CRANK TOWER TO VERTICAL POSITION AND INSERT LOWER HINGE PIN. RAISE MAST TO DESIRED HEIGHT BY CRANKING WINCH ON TOWER.

9A- TO LOWER MAST, DISENGAGE RATCHET ON WINCH, HOLDING ON TO WINCH HANDLE, AND PULL MAST LOCK RELEASE CABLE. CRANK WINCH UNTIL MAST IS AT DESIRED HEIGHT, ENGAGE RATCHET, AND LET GO OF RELEASE CABLE.

GROUND POST GP-50 G

MAST LOCK RELEASE CABLE

CABLE CLAMP

SECTION A-A

R-50G

BRACKETED INSTALLATION

(NOTES 1, 2, 3, 4B, 5B, 6B & 7B)

GROUND POST INSTALLATION

(NOTES 1, 2, 3, 4A, 5A, 6A, 7A & 9A)

ROHN

CRANK-UP MAST (\*R-50G AND OPTIONAL GP-50G)

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DATE	BY
12-15-71	GP-50

REVISIONS	DATE	BY
1	12-15-71	GP-50

TITLE	DESCRIPTION	DATE	BY
CRANK-UP MAST	REPLACED BY HOUSE BRKT.	12-15-71	GP-50

FILE NO.	DWG. NO.
	C-690612

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE GIVEN IN INCHES	FEET
1/2"	1/2"
1"	1"
2"	2"
3"	3"
4"	4"
5"	5"
6"	6"
7"	7"
8"	8"
9"	9"
10"	10"
11"	11"
12"	12"
13"	13"
14"	14"
15"	15"
16"	16"
17"	17"
18"	18"
19"	19"
20"	20"
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33"	33"
34"	34"
35"	35"
36"	36"
37"	37"
38"	38"
39"	39"
40"	40"
41"	41"
42"	42"
43"	43"
44"	44"
45"	45"
46"	46"
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74"	74"
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90"	90"
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92"	92"
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100"	100"

# ROHN NO. 6

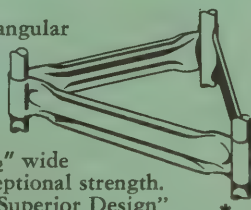
*Versatile - All Purpose - Guyed*

## CRANK-UP TOWER

This hot-dipped galvanized tower lifts skyward with the simple turn of a crank and offers effortless flexibility of height in seconds. It features the same popular ROHN design and rugged construction as other models that have been acclaimed throughout the industry. It will fulfill the greater majority of your needs that call for a "crank-up" type tower. Available in heights of 37, 54 and 71 feet.

### *Construction uses "Magic Triangle"*

Features equilateral triangular design with cross bracing utilizing a one-piece unit firmly welded to tubular steel legs. Triangular cross bracing is full 2½" wide and corrugated for exceptional strength. Only ROHN has this "Superior Design" feature.



\* Patent Number 2,846,760

### *Special Features*

- COMPLETELY galvanized tower sections.
  - STURDY winch and rust proof high strength cable.
- SAFETY rests constructed of heavy gauge steel relieve tension on cable when tower is extended for long period of time.
  - COSTS less because ROHN production techniques and know-how utilize mass production machinery, yet give better quality.

**Entire  
tower  
hot  
dipped  
galvanized!**

## ALL MODELS GUYED AT TOP OF EVERY SECTION

The 71 foot model uses four 20' sections

The 54 foot model uses three 20' sections

The 37 foot model uses two 20' sections

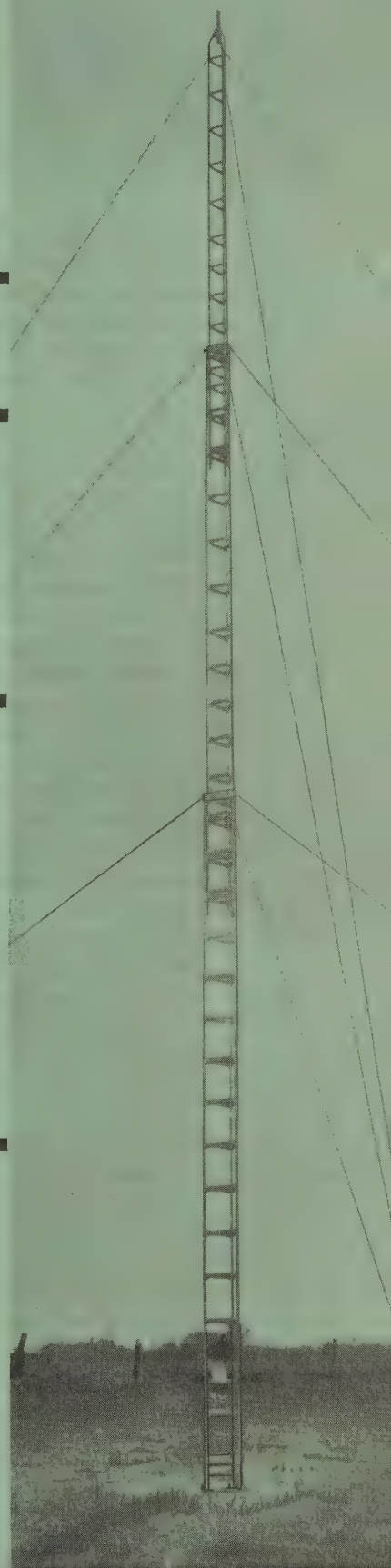
*(All 20 foot sectional models have a 3' safety overlap on each section)*

*Exclusive Design and Manufacture by:*

# ROHN manufacturing co

P. O. Box 2000, Peoria, Illinois

TO ORDER SEE REVERSE  
SIDE OF THIS SHEET FOR  
CATALOG NUMBERS, ETC.





LIGHT DUTY #6 SERIES - GUYED CRANK-UP TOWERS

(Top section will not accommodate rotor mounted internally)

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
637G	Light duty guyed 37' crank-up tower with hinged base plate, $\frac{1}{2}$ " anchor bolt, guy lugs, safety stops, winch, and cable. Tower consists of 2 - 20' sections with an overlap of 3' between each section. Top section width is $8\frac{1}{2}$ ", lower section is $10\frac{1}{2}$ ".	230.00	160.00	145
654G	Light duty guyed 54' crank-up tower with hinged base plate, $\frac{1}{2}$ " anchor bolt, guy lugs, safety stops, winch, and cable. Tower consists of 3 - 20' sections with an overlap of 3' between each section. Top section width is $8\frac{1}{2}$ ", center section $10\frac{1}{2}$ ", lower section $12\frac{1}{2}$ ".	315.00	220.00	225
671G	Light duty guyed 71' crank-up tower with hinged base plate, $\frac{1}{2}$ " anchor bolt, guy lugs, safety stops, winch, and cable. Tower consists of 4 - 20' sections with an overlap of 3' between each section. Top section width is $8\frac{1}{2}$ ", center top section $10\frac{1}{2}$ ", lower middle section $12\frac{1}{2}$ ", bottom section $14\frac{1}{2}$ ".	430.00	300.00	335
M200	Mast, 10' long, 2" O.D., 16 ga.	11.45	8.00	14
M200-H	Mast, 10' long, 2" O.D., 1/8" wall	21.45	15.00	30
HBCP6	Universal house bracket for #6 series crank-up	17.85	12.50	10
RM	Rotor mount for #6 crank-up	30.70	21.50	36
TB-2	Thrust bearing, ball bearing, self-aligning, for 2" O.D. tubing	21.45	15.00	8

GUYING KITS FOR #6 CRANK-UP TOWERS

K637	Ground mounting guy kit for 637G crank-up	100.00	70.00	40
K654	Ground mounting guy kit for 654G crank-up	135.00	95.00	50
K671	Ground mounting guy kit for 671G crank-up	180.00	125.00	77

NOTE: All guy kits consist of guy wire, screw type earth anchors, thimbles, turnbuckles, cable clamps, and equalizer plates.

NOTE: Unloading of all shipments is customer's responsibility. Inspect your tower very carefully before using it to make sure it works properly. ROHN cannot assume any responsibility after any crank-up tower leaves its plant.

NOTE: Crank-up towers can be dangerous and ROHN does not recommend their use. This product is made available only due to the demand by experimenters and should be used for that purpose only.

F.O.B. PEORIA, ILLINOIS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



INSTALLATION INSTRUCTIONS FOR  
ROHN #6 SERIES CRANKUP TOWERS.

For complete factory recommended installation kits, see price list and parts list. All installation kits include guy wire, turnbuckles, cable clamps, guy wire, thimbles and screw type earth anchors.

Receiving and inspection.

Upon receiving your new Rohn tower, care should be taken in the inspection of your unit prior to the removal of the shipping bands. Make a visual inspection to see that all shipping bands are in place and not broken. Make certain that the safety stops are strapped on the bottom of the unit. Inspect the winch for damage. Try to determine if any of the sections are bent. If damage is apparent, contact the local delivering carrier and make claim.

INSTALLATION INSTRUCTIONS

#1 Footing Details for all Rohn #6 series crankup towers.

Dig a foundation footing 2' x 2' x 1' deep (See drawing #C-620617) and pour concrete. Using the hinged base plate (Attached to base of tower) as a template, install the 1/2" foundation bolt in the wet concrete. Leave approximately 1" of the bolt extended above the base. Allow concrete at least 24 hours drying time before installing tower.

#2 Installation of earth anchors.

Using Rohn #GAS-604 screw type earth anchors, or equivalent anchor with a holding power of 2,000# or better. Distance anchors should be placed from the base of tower and will vary with the model tower used. See below for factory recommended anchor distance from tower base.

#637G Crankup tower	Three anchor points, spaced 120° apart, 20' from base of tower.
#654G Crankup tower	Three anchor points, spaced 120° apart, 30' from base of tower.
#671G Crankup tower	Three anchor points, spaced 120° apart, 40' from base of tower.

When anchor points have been established and spaced 120 degrees apart, using a piece of scrap pipe or bar placed through the eye of the anchor rod, the anchor is then screwed speedily and solidly into the ground by just two men. When anchors are in place, install equalizer plates and turnbuckles per drawing.

#3 Guy Wires.

By using the guy chart, determine the length of guy wire required for each guy. Pre-cut the guy wires making certain that sufficient amount has been allowed for sag and turnbuckles. Attach all guy wires to the tower, using two cable clamps for each attachment.

#### #4 Raising the tower to the vertical position.

When the concrete has properly hardened, bolt the base plate on the foundation. See drawing. By lifting the base of the tower on the base plate, insert the two base plate bolts in the tower and base flanges. Do not tighten these bolts more than finger tight at this time. Now, raise the tower to the vertical position and insert the front base plate bolt. All base bolts can now be tightened. When the tower is in the vertical position, the lower set of guy wires can be installed and brought up to final tension. Do not apply over 200% tension to any one guy wire.

#### #5 Cranking up the tower.

You may now proceed to crankup the tower. It is adviseable to have a man on each set of guys in the event a gust of wind should come up while raising or lowering the tower. The #6 series crankup is not intended as a self-supporting tower and should be guyed in all instances. When cranking up the tower, care should be taken not to raise or lower the tower too fast. You will notice when raising your tower that all sections raise and lower together (3 and 4 section models only). This gives you a uniform lap between all sections at all times. When the tower is fully extended, all guy wires may now be fastened to the anchors. Do not apply full guy wire tension at this time, just enough to keep the tower in the vertical position until the safety stops are installed.

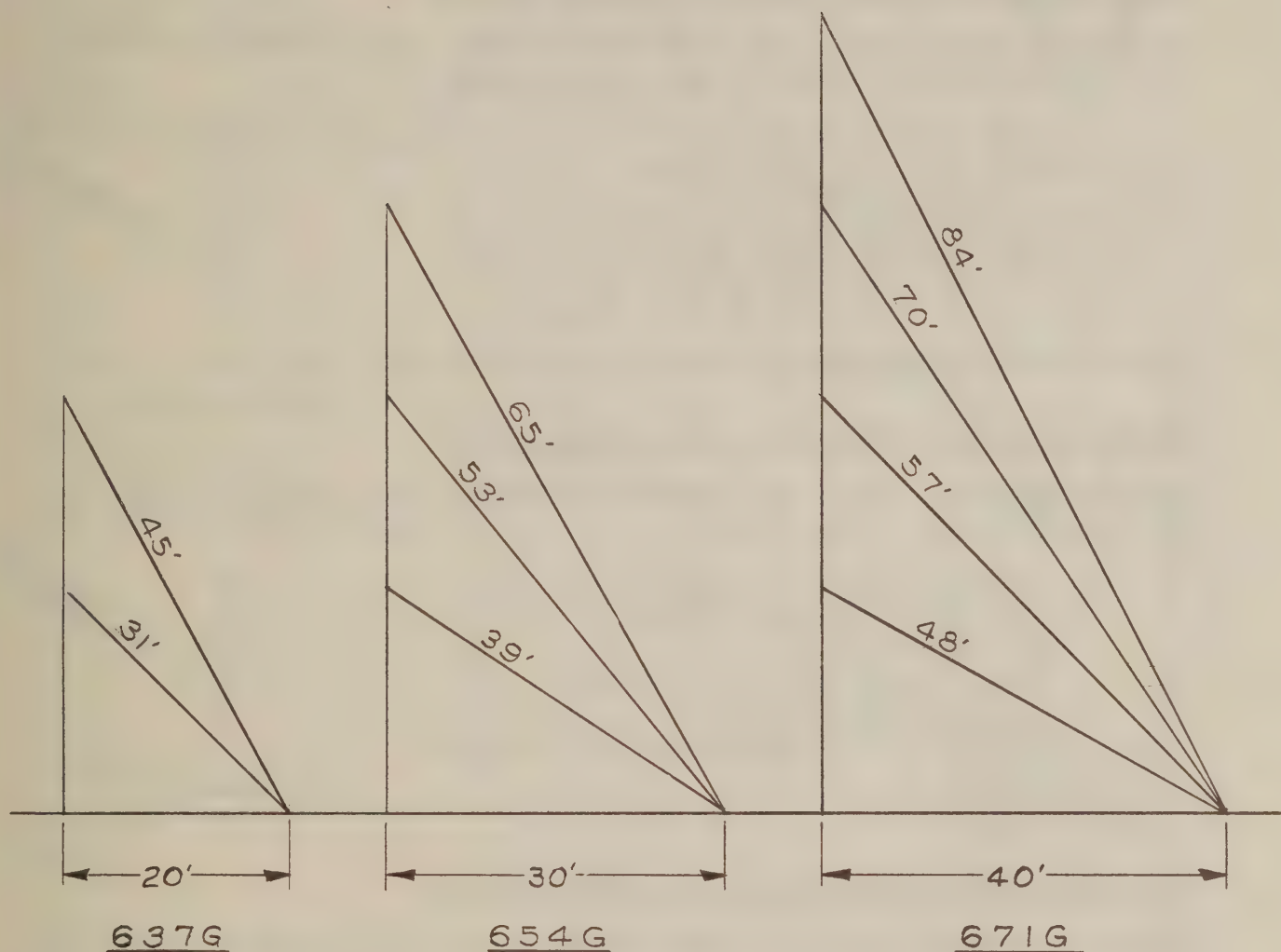
#### #6 Installation of safety stops.

In order to release the tension on the raising and lowering cable, installation of safety stops is required. With safety stops installed, this will eliminate the hazard of small children trying to raise and lower (tower can not be lowered when stops are in place). You will notice when the tower is fully extended that the bottom of the center section is approximately 2" above a horizontal brace on the top of the bottom section. (See drawing). This brace is located about 3' below the top of the lower section. By using a ladder or other means, insert the safety stop at this point. After the stop is installed, lower the tower by using the hand winch until the middle section is resting on the safety stop. You will notice that the raising and lowering cable is now slack and all tension is removed from same.

**DO NOT ATTEMPT TO CLIMB THE TOWER WITHOUT THE SAFETY STOPS. NEVER CLIMB ANY PORTION OF THE TOWER USING ONLY THE WINCH CABLE TO SUPPORT THE LOAD.** You may now proceed to install the safety stop at the 37' and/or 54' level. (This applies to towers with three and four sections.) This stop should also be installed by using a ladder or other means. After all safety stops are in place, you may now release all tension on the raising winch and remove the handle for storage in a safe place.

#### #7 Guy Wire Tension.

All guy wires can now be tightened to final tension. Do not apply over 200% tension to any one guy wire.



ALL GUY WIRE IS  $\frac{1}{8}$ " DIAMETER.

GUY WIRE LENGTHS HAVE BEEN CALCULATED TO ALLOW APPROXIMATELY 3 FEET FOR CONNECTIONS AND SAG IN THE GUY WIRE AND ASSUMING LEVEL GROUND FOR THE INSTALLATION OF THE TOWERS.

DRAWN L. HOFFMAN	CUSTOMER	TITLE
CHECKED		GUY CHART FOR
APPROVED		MODEL NO. 6 CRANK-UP TOWER
DATE JUN. 27, 1962	ROHN MFG. CO. PEORIA, ILLINOIS	DRAWING NO.
SCALE $\frac{1}{16}$ " = 1'-0"		A-620627



## GUYING KIT PARTS LIST FOR ROHN #6 CRANK-UP TOWERS

GUYING KIT K637 for MODEL 637G - 37' CRANK-UP TOWER

Anchors spaced  $120^{\circ}$  apart, 20' from base of tower. Guys attached at the 20' and 37' levels on the tower.

1/8" galvanized H.S. guy wire	250'
1/8" malleable cable clamps	24
1/4" guy thimbles	12
GAS-604 screw type earth anchors	3
3/8" x 6" E&E turnbuckles	6
EP-2534-3 equalizer plates	3

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GUYING KIT K654 for MODEL 654G - 54' CRANK-UP TOWER

Anchors spaced  $120^{\circ}$  apart, 30' from base of tower. Guys attached at the 20', 37', and 54' levels on the tower.

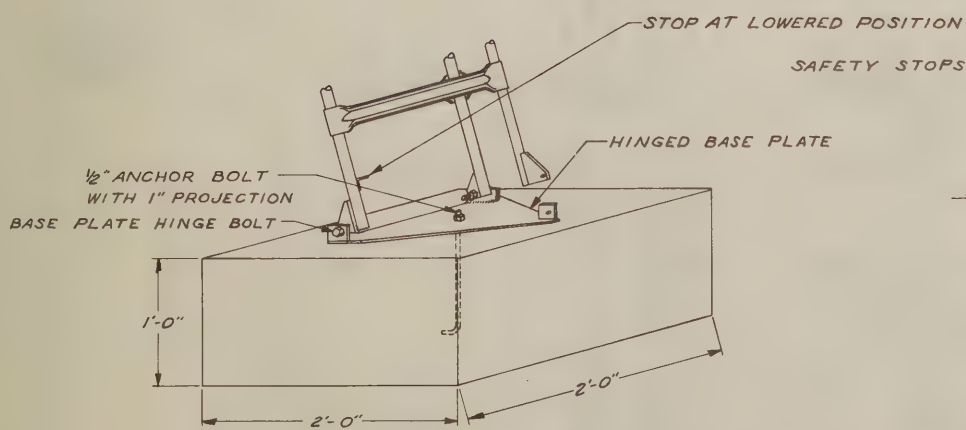
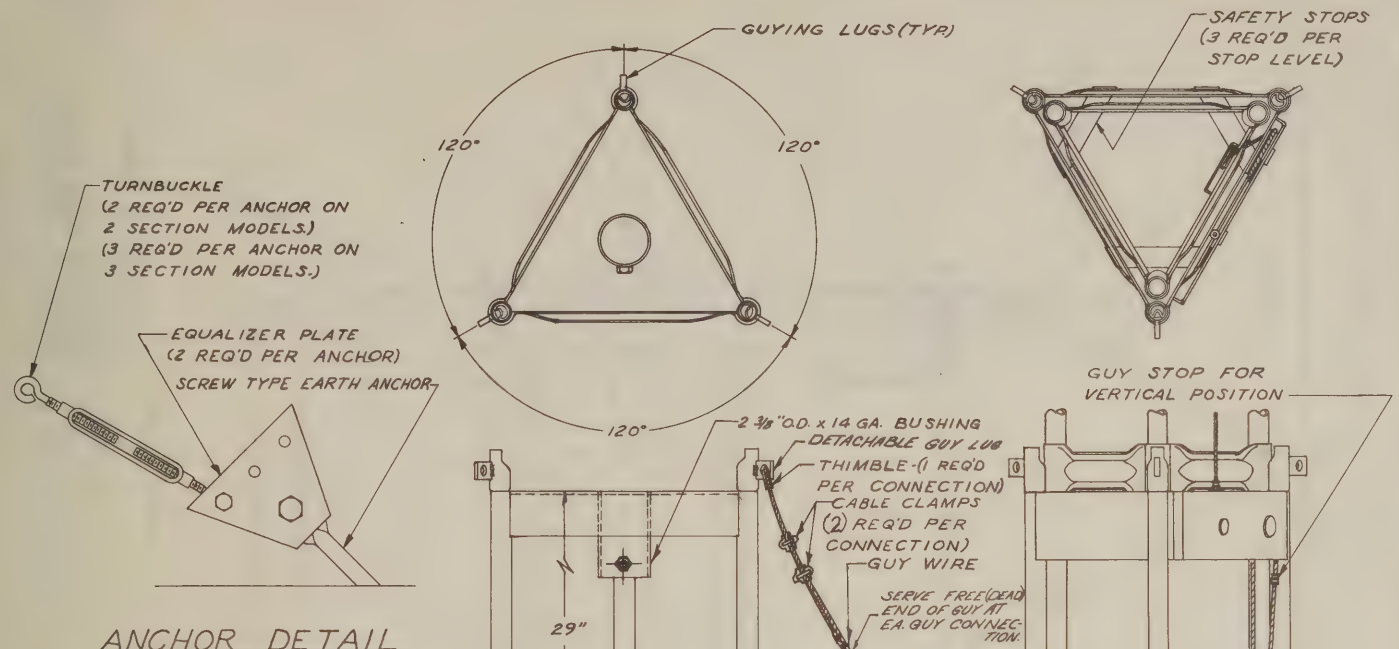
1/8" galvanized H.S. guy wire	500'
1/8" malleable cable clamps	36
1/4" guy thimbles	18
GAS-604 screw type earth anchors	3
3/8" x 6" E&E turnbuckles	9
EP-2534-3 equalizer plates	3

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GUYING KIT K671 for MODEL 671G - 71' CRANK-UP TOWER

Anchors spaced  $120^{\circ}$  apart, 40' from base of tower. Guys attached at the 20', 37', 54', and 71' levels on the tower.

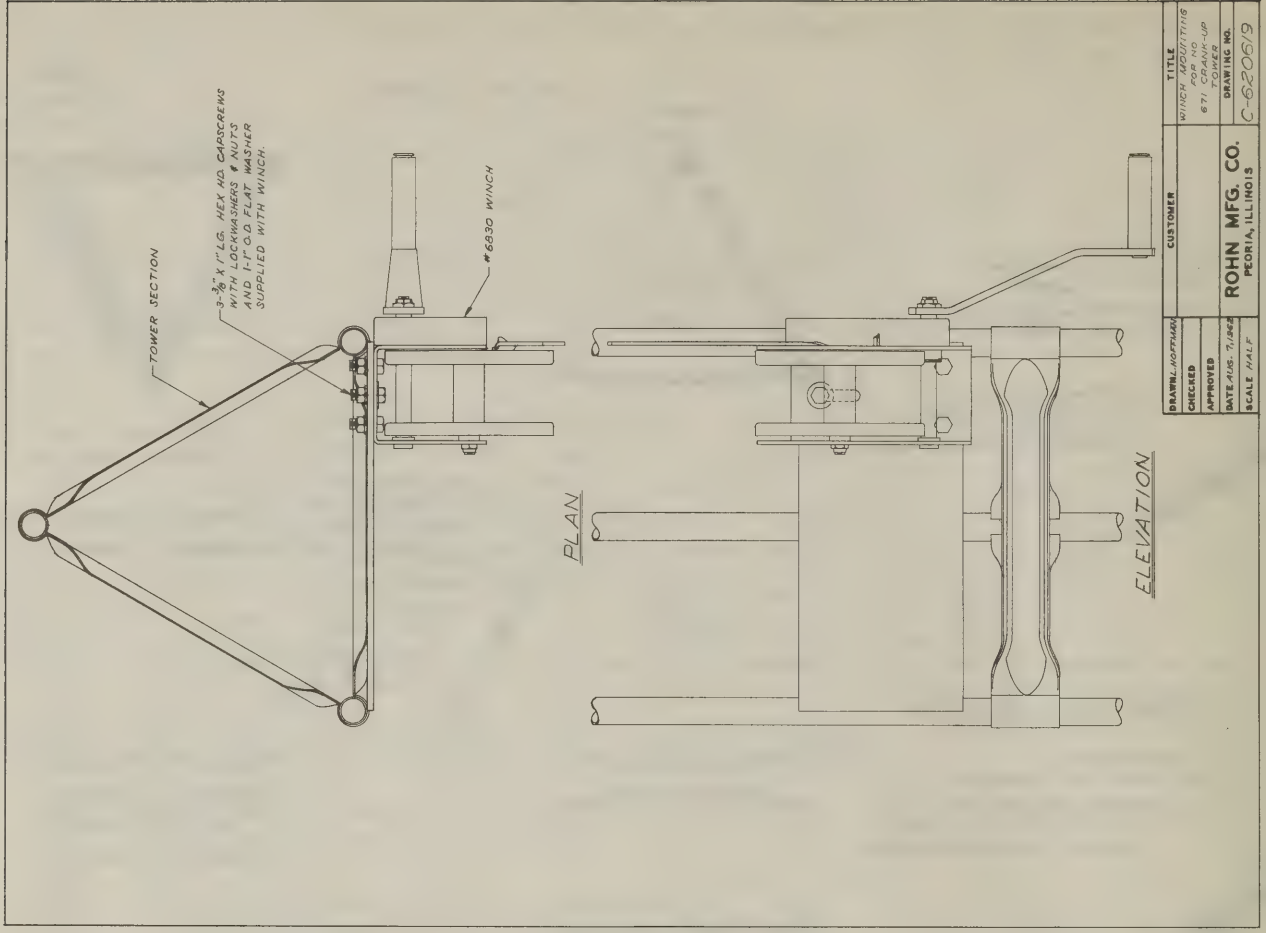
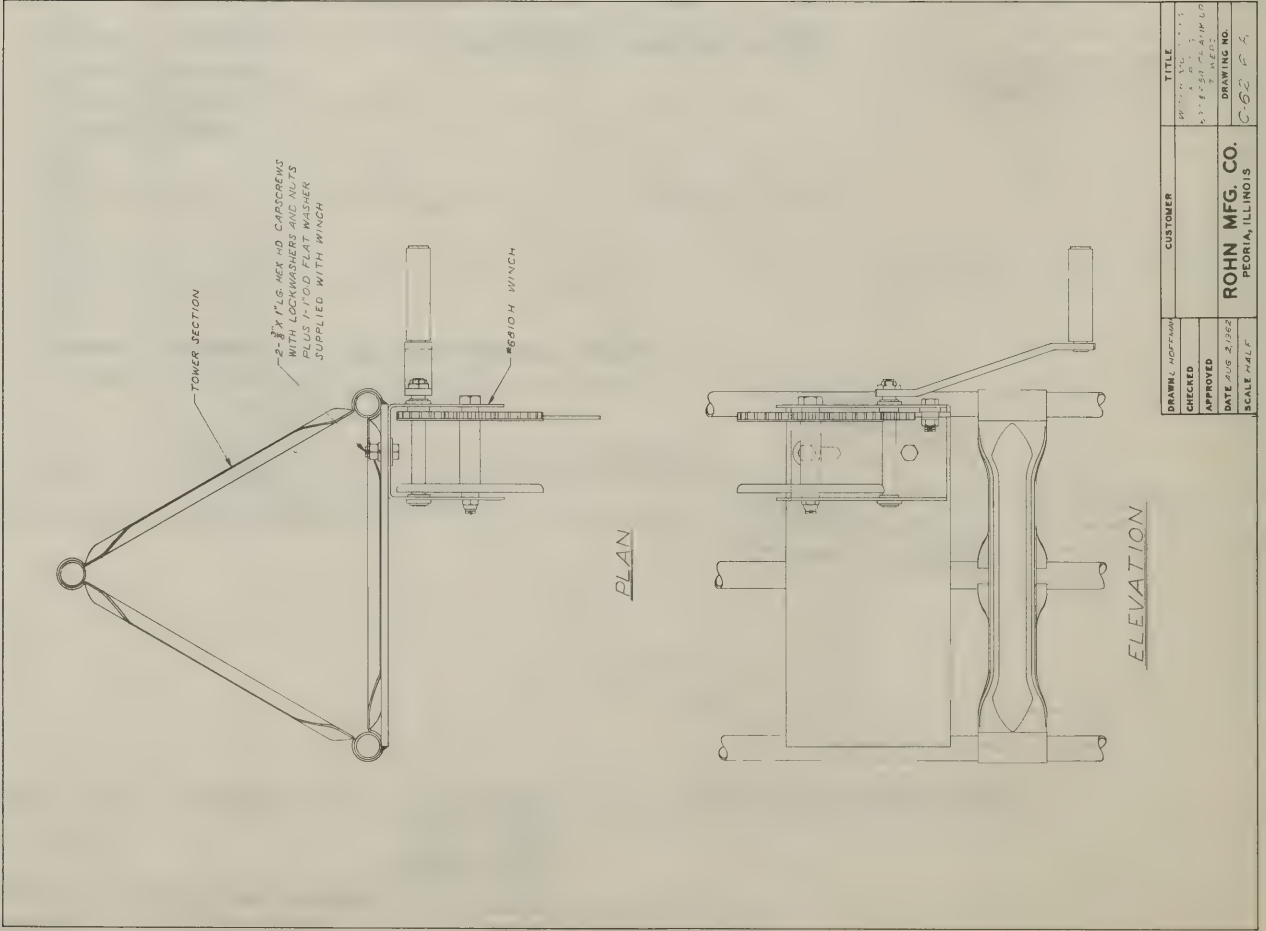
1/8" galvanized H.S. guy wire	800'
1/8" malleable cable clamps	48
1/4" guy thimbles	24
GAS-604 screw type earth anchors	3
3/8" x 6" E&E turnbuckles	12
EP-2534-5 equalizer plates	3



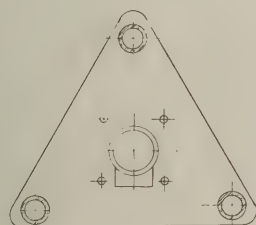
SAFETY STOP  
INSTALLATION DETAIL

DRAWN L. HOFFMAN	CUSTOMER	TITLE
CHECKED <i>OH</i>		MODEL NO. 6 SERIES CRANK-UP TOWER
APPROVED <i>OH</i>		DRAWING NO.
DATE JUN. 18, 1962	ROHN MFG. CO.	C-620617R
SCALE NONE	PEORIA, ILLINOIS	

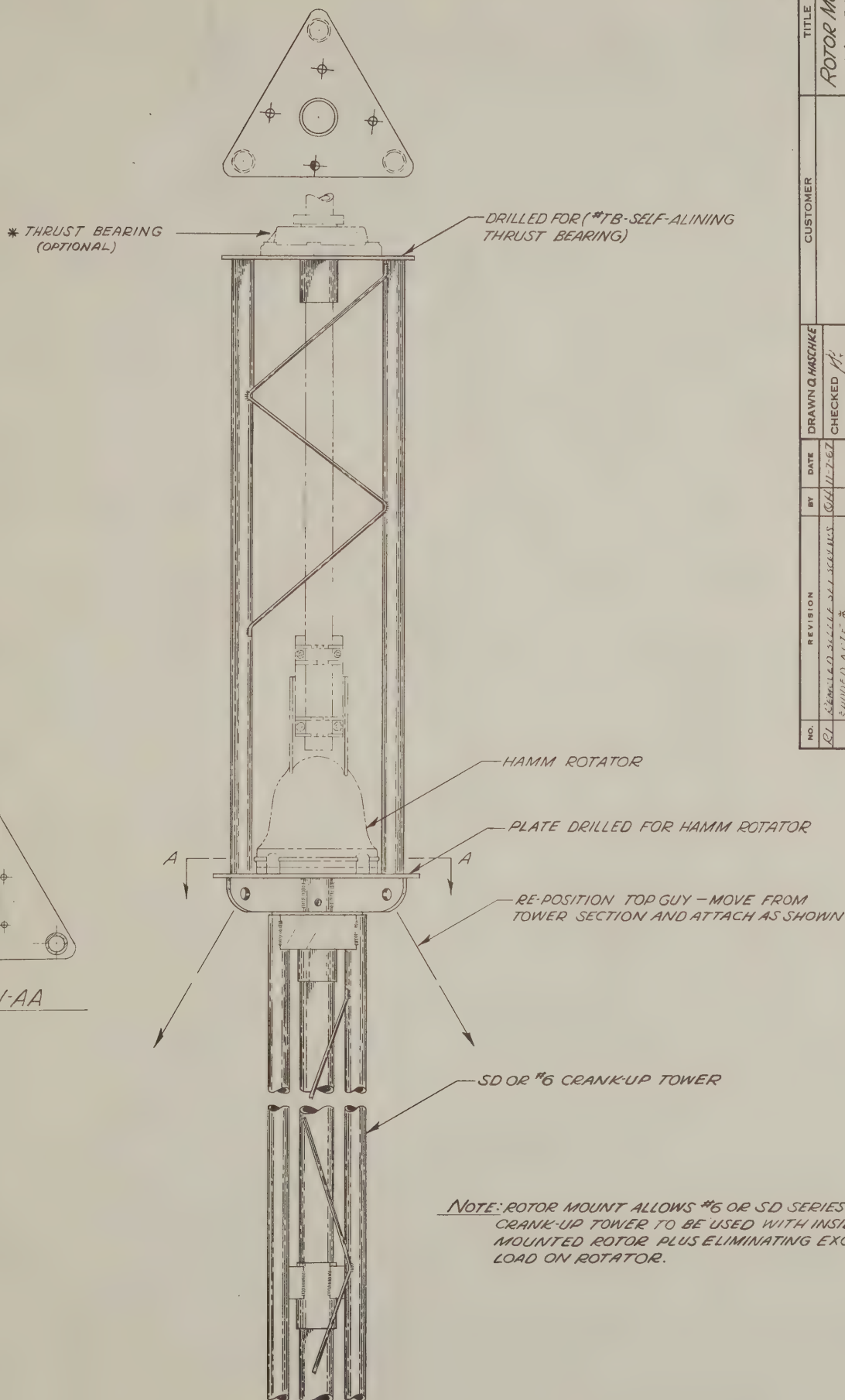
REVISED, 4-6-65 DP





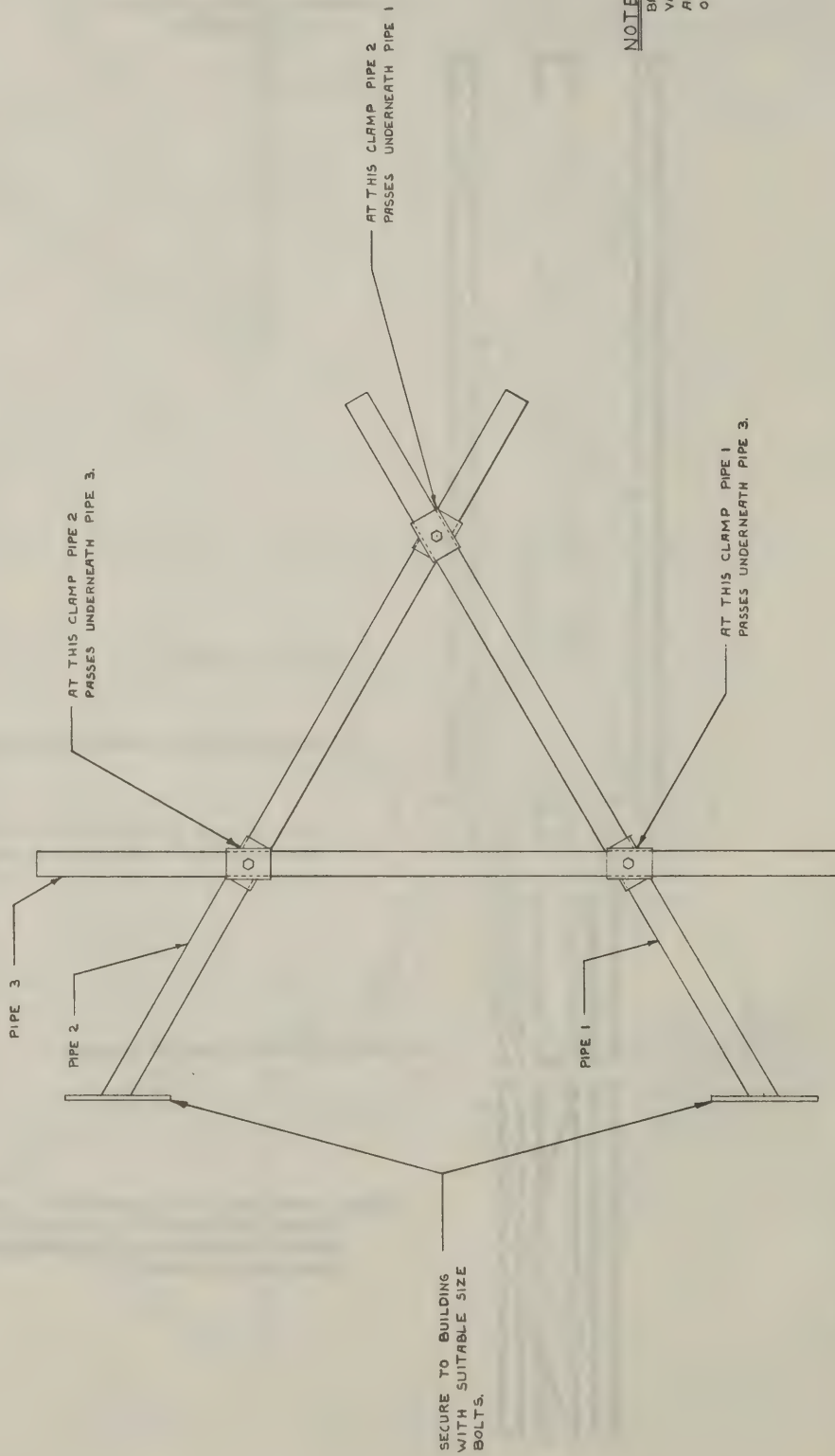


SECTION-AA



NOTE: ROTOR MOUNT ALLOWS #6 OR SD SERIES CRANK-UP TOWER TO BE USED WITH INSIDE MOUNTED ROTOR PLUS ELIMINATING EXCESS LOAD ON ROTATOR.

NO.		REVISION		BY		DATE		DRAWN Q. HASCHKE		CUSTOMER		TITLE	
R1		REMOVED SILELL ALL SCALUS		04/11/76		04/11/76		CHECKED H.		ROHN MANUFACTURING Co. PEORIA, ILLINOIS		ROTOR MOUNT	
		SHOWN ACTU. *						APPROVED DAK				No. RM	
								DATE 4-15-69				DRAWING NO.	
								SCALE NONE				C650417 R1	



NOTE:  
BRACKET IS ADJUSTABLE FOR  
VARIOUS TOWER SIZES AND  
ADJUSTABLE FOR VARIOUS DISTANCES  
OF TOWER FROM BUILDING.

DRAWN L. MORAN	CUSTOMER	TITLE
CHECKED		ASSEMBLY DRAWING OF ADJUSTABLE HOUSE BRACKET FOR CRANKUP
APPROVED		
DATE OCT. 1, 1960		DRAWING NO.
SCALE NONE		C-621001
	ROHN MFG. CO. PEORIA, ILLINOIS	

HD HEAVY DUTY HAM & INDUSTRIAL CRANK-UP TOWERS

(Tower includes mounting plate for mounting Ham "M" rotor inside top section)

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>CRATED WTS.</u>
HD3-4-37G	Heavy duty 37' crank-up tower with roller guides and safety stops. Hot-dipped galvanized. Top section 14" wide, bottom section 18-1/16" wide. (CRATED)	760.00	530.00	525
HD3-5-54G	Heavy duty 54' crank-up tower with roller guides and safety stops. Hot-dipped galvanized. Top section 14" wide, bottom section 22-1/8" wide. (CRATED)	1115.00	780.00	725
HD3-6-71G	Heavy duty 71' crank-up tower with roller guides and safety stops. Hot-dipped galvanized. Top section 14" wide, bottom section 26-3/16" wide. (CRATED)	1620.00	1135.00	1125
HD3-7-88G	Heavy duty 88' crank-up tower with roller guides and safety stops. Hot-dipped galvanized. Top section 14" wide, bottom section 30-1/4" wide. (CRATED)	2250.00	1575.00	1575

GUYING KIT COMPLETE FOR ABOVE TOWERS

(Consists of necessary guy wire, turnbuckles, cable clamps, anchors, etc.)

GKSD-2	Guy kit for HD3-4-37G tower	115.00	80.00	50
GKSD-3	Guy kit for HD3-5-54G tower	150.00	105.00	78
GKSD-4	Guy kit for HD3-6-71G tower	210.00	145.00	104
GKSD-5	Guy kit for HD3-7-88G tower	260.00	180.00	138

ANTENNA MAST GALVANIZED

M200	Mast, 10' long, 2" O.D., 16 ga.	11.45	8.00	14
M200-H	Mast, 10' long, 2" O.D., 1/8" wall	21.45	15.00	30

NOTE: See reverse side for necessary bases for above towers.

NOTE: Field motorizing of unit not recommended.

NOTE: Unloading of all shipments is customer's responsibility. Inspect your tower very carefully before using it to make sure it works properly. ROHN cannot assume any responsibility after any crank-up tower leaves its plant.

NOTE: Prices on towers include a skid, bracing, enclosure, and steel banding (all for the protection of the tower in handling and shipping).

F.O.B. PEORIA, ILLINOIS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



HD HEAVY DUTY TOWER BASES

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>FLAT BASE - HINGED</u> (With Concrete Bolt) - Used for mounting tower on top of a concrete slab.				
FB-4	Flat base for HD3-4-37G tower	20.00	14.90	16
FB-5	Flat base for HD3-5-54G tower	23.00	16.00	20
FB-6	Flat base for HD3-6-71G tower	29.00	20.00	25
FB-7	Flat base for HD3-7-88G tower	34.00	24.00	30

CONCRETE BASE - HINGED - Used for mounting tower inside a concrete pier.

CB-4	Concrete base for HD3-4-37G tower	74.00	52.00	58
CB-5	Concrete base for HD3-5-54G tower	86.00	60.00	65
CB-6	Concrete base for HD3-6-71G tower	103.00	72.00	80
CB-7	Concrete base for HD3-7-88G tower	122.00	85.00	95

TILTING BASE - Used for self-erecting of tower as well as fold-over arrangement for servicing antenna on the ground. Price includes separate winch for erecting and folding tower over.

TBCB-4	Tilting base for HD3-4-37G tower	264.00	185.00	175
TBCB-5	Tilting base for HD3-5-54G tower	343.00	240.00	220
TBCB-6	Tilting base for HD3-6-71G tower	400.00	280.00	265
TBCB-7	Tilting base for HD3-7-88G tower	414.00	300.00	290

HBCP6	Universal house bracket for towers up to 54' high	17.85	12.50	10
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HBHD	Universal house bracket for towers up to 122' high	21.45	15.00	15
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TB-2	Thrust bearing, ball bearing, self-aligning, for 2" O.D. tubing	21.45	15.00	8
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* MRC-300	Motorized winch for HD series towers, complete with remote control unit with necessary wire and junction boxes	1360.00	950.00	175
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NOTE: Safety stops are necessary for permanent tower installations requiring climbing.

\* Motorized winch/remote control unit is also made for the SD series towers. Prices available upon request.

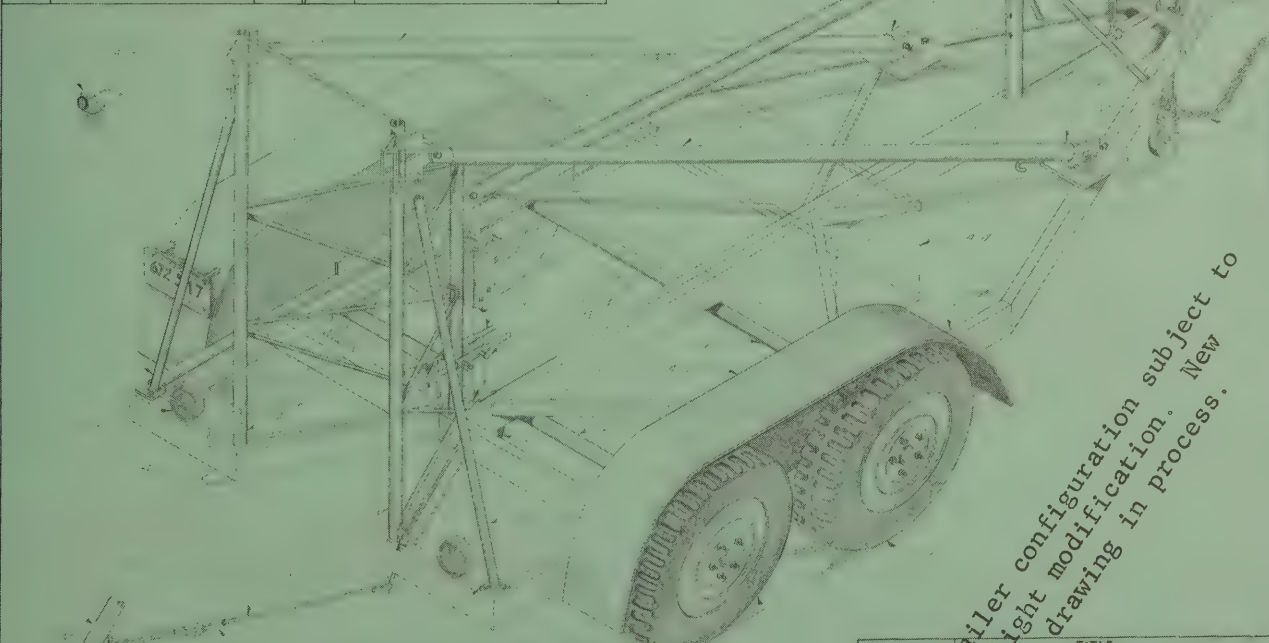
F.O.B. PEORIA, ILLINOIS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

1	LEVEL TRAILER
2	LOOSEN TURNBUCKLE AND REMOVE TIE DOWN CABLE
3	REMOVE CABLE FROM HITCH
4	OF TRAILER, REMOVE CABLE FROM OTHER END TONGUE
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DRAWN: MASCHKE	TITLE
CHECKED: [initials]	TRAILERS
APPROVED: [initials]	CRANK-UP TOWERS
DATE: 7-8-64	ROHN MFG. CO.
SCALE: NONE	PEORIA, ILLINOIS
	D-640705

Trailer configuration subject to slight modification. New drawing in process.

HEAVY DUTY COMMUNICATIONS TRAILERS

The ROHN portable, single axle and dual axle communications trailers are designed to accommodate the ROHN SD Series and HD Series crank-up towers.

IDEAL FOR THE FOLLOWING USES . . .

Fringe area TV antenna testing.  
Portable two-way communications.  
Microwave survey and testing.  
Portable lighting (for construction projects).

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
THD-1	Heavy duty, portable, single axle trailer, with outrigger arms, tilting plate w/winch, wheels, and tires.  Trailer will handle combined weight of tower and load up to 800 lbs.  Trailer designed to accommodate SD Series (up to 88') and HD Series (up to 54').	1939.00	1357.00	1030
THD-2	Extra heavy duty, portable, dual axle trailer, with outrigger arms, tilting plate w/winch, wheels, and tires.  Trailer will handle combined weight of tower and load up to 1500 lbs.  Trailer designed to accommodate SD Series (up to 122') and HD Series (up to 88').	2653.00	1857.00	1510

ACCESSORIES FOR TRAILER

Heavy duty fenders for single axle	194.00	107.15	70
Heavy duty fenders for dual axle	255.00	178.60	160
Tool box (12"x12"x36")	112.00	78.60	65
Electric brakes with controls	255.00	178.60	35
Turn, stop, and clearance lights	194.00	107.15	10

NOTE: Trailers and assorted accessories subject to Federal Excise Tax.

F.O.B. PEORIA, ILLINOIS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



# ROHN<sup>®</sup> "fold-over" TOWERS

The ideal answer for tower requirements of amateur radio operators, for experimentation, for TV service and other similar purposes that can utilize this exclusive ROHN "fold-over" tower engineering.

## COMPLETELY HOT-DIPPED GALVANIZED, AFTER FABRICATION!

These special ROHN "fold-over" towers have wide acceptance and acclaim. This tower satisfies a wide range of requirements of those who wish a tower that will conveniently allow service and interchange of antennas and rotators. Amateurs especially find the ROHN "fold-over" tower the ideal answer.

The ROHN fold-over towers are structurally designed to handle practically all sizes, types and models of amateur radio antennas. The towers are equilateral triangles with solid steel "zig-zag" cross bracing, all electric welded. Completed towers are approximately 50 feet in height. Guying is necessary at the hinge. Check the specification sheet to obtain the many loads and conditions in which a ROHN fold-over tower will serve your need.

The design permits fold-over of the tower onto the ground so that all servicing work on rotator and/or antenna can be done *entirely* at ground level. Not only is the work easy to perform, but also there is where safety is foremost! In a matter of minutes, the complete tower is folded over so that the antenna, rotator, etc., are immediately accessible.

The tower includes the necessary 10 foot sections of ROHN tower, plus a top section, a complete hinged section, and the boom and windlass complete with cable.

## AVAILABLE IN 2 MODELS:

(1) for ground installation, or (2) for flat roof or other similar type flat surface installation.

Manufacture and exclusive design by

**ROHN<sup>®</sup>** Manufacturing Co.

Box 2000, Peoria, Illinois 61601

# SPECIFICATIONS FOR ROHN FOLD-OVER TOWERS

## ITEMS

MAX. LIFTING CAPACITY:  
SAFE MOMENT AT HINGE, FT.-LBS.  
SAFE LOAD AT APEX, LBS.

### ANTENNA LOADS - SAFE:

WITH GUYS AT HINGE ONLY	20 PSF	AREA, SQ.FT.
		WEIGHT, LBS.
WITH GUYS AT APEX AND AT HINGE	30 PSF	AREA, SQ.FT.
		WEIGHT, LBS.
	20 PSF	AREA, SQ.FT.
		WEIGHT, LBS.
	30 PSF	AREA, SQ.FT.
		WEIGHT, LBS.

### PHYSICAL PROPERTIES:

TOWER HEIGHT ABOVE BASE, FT.  
DISTANCE - BASE TO HINGE, FT.  
DISTANCE - HINGE TO APEX, FT.  
RADIUS REQUIRED FOR BOOM, FT.  
WEIGHT - INCLUDING BOOM, LBS.  
WIDTH OF TOWER TRIANGLE, IN.  
SIDE RAIL DIAMETER, IN.  
SIDE RAIL THICKNESS, GA.NO.  
MAX. WINCH CABLE TENSION, LBS.

STD. - BASIC TOWER; SBH - SECT. BELOW HINGE; SAH - SECT. ABOVE HINGE; SABH - SECT. ABOVE AND BELOW HINGE.  
HOT-DIPPED GALVANIZED AFTER FABRICATION.

7-10-69

MODEL No. FK 25 G			
STD.	SBH	SAH	SABH

(ALL WINCH CABLE - 5/32" AIRCRAFT)			
4150	4150	3110	3110
160	160	115	115

(USING 3/16" H.S. GUY WIRE)			
6.2	6.2	2.3	2.3
160	160	115	115
3.0	3.0	—	—
160	160	—	—
13.3	15.4	14.1	11.7
160	160	115	115
7.7	8.9	7.9	6.2
160	160	115	115

MODEL No. FK 45 G			
STD.	SBH	SAH	SABH

(ALL WINCH CABLE - 5/32" AIRCRAFT)			
9300	9300	8240	8240
190	190	135	135

(USING 1/4" H.S. GUY WIRE)			
15.2	15.2	8.3	8.3
190	190	135	135
8.9	8.9	3.8	3.8
190	190	135	135
29.1	34.8	33.3	28.4
190	190	135	135
18.1	21.9	20.5	17.2
190	190	135	135

44	54	54	64
19	29	19	29
25	25	35	35
16	16	16	16
500	570	570	640
18	18	18	18
1.25	1.25	1.25	1.25
14	14	14	14
420	420	420	420

ROHN MFG. CO.  
PEORIA, ILLINOIS



(Replaces D-76070)

## NO. 25 FOLD-OVER TOWERS

(Hot-Dipped Galvanized Finish After Fabrication)

PART NO.	LIST	SUGG'D. DEALER	WT.
<u>FK25G - Ground Installation - Must be Guyed at Hinge</u>			
3 - 25G - 10' sections	400.00	280.00	355
1 - 25AG-4 - Top section - 8' length; upper end terminating in 11" dia. flat circular plate w/2½" dia. hole in center.			
1 - SB25G - Short base section - 40" - for concrete mounting.			
1 - Hinge section - 10'			
1 - Boom (2 pieces)			
1 - Windlass and 40' of cable			
NOTE: All hardware for assembly of above included.			

GGK25G-1 - Ground Guy Kit - For Guying at HINGE ONLY When Using FK25G and When Using Section Above Hinge

185' - 3/16" E.H.S. galv. guy wire	95.00	65.00	47
24 - 3/16" cable clamps, malleable			
8 - 1/4" galv. thimbles			
4 - 3/8"x6" galv. turnbuckles, E&J			
4 - GAS-604 - Screw guy anchors			

GGK25G-2 - Ground Guy Kit - For Guying at Hinge AND at Top When Using FK25G with Section Below Hinge and/or Above Hinge

500' - 3/16" E.H.S. galv. guy wire	145.00	100.00	74
48 - 3/16" cable clamps, malleable			
12 - 1/4" galv. thimbles			
8 - 3/8"x6" galv. turnbuckles, E&J			
4 - GAS-604 - Screw guy anchors			

FK25FG - Flat Surface Installation - Must be Guyed at Hinge

Same as FK25G, except has FR25G flat roof mount instead of SB25G short base section.	415.00	290.00	369
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FGK25G-1 - Flat Surface Guy Kit - For Guying at HINGE ONLY When Using FK25FG and When Using Section Above Hinge

Same as GKG25G-1, except does NOT have GAS-604 anchors.	47.00	33.00	19
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FGK25G-2 - Flat Surface Guy Kit - For Guying at Hinge AND at Top When Using FK25FG with Section Below Hinge and/or Above Hinge

Same as GKG25G-2, except does NOT have GAS-604 anchors.	97.00	68.00	46
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MISCELLANEOUS ITEMS AVAILABLE FOR ABOVE TOWERS

TB-2 - Thrust bearing, ball bearing, self-aligning, for 2" O.D. tubing, bolts to A-4 top.	23.60	16.50	8
AB - Hardwood bearing, w/2" hole & drilled to bolt to A-4 top	5.65	3.95	1
AS25G - Accessory shelf. Triangular plate w/2½" hole to mount amateur rotor or mast bearing. Mounts inside tower sect.	14.80	10.35	4
FK25G-SBH-1 - Includes: 25G sect. to be added below hinge, 1 pulley & 10' longer cable. (When ordered w/FK25G or FK25FG.)	49.30	34.50	48
FK25G-SBH-2 - Includes: 25G sect. to be added below hinge, 1 pulley & 50' of cable. (For add. to existing FK25G or FK25FG.)	55.70	39.00	49
FK25G-SAH - 25G section, to be added above hinge.	34.45	24.10	40

NOTE: Any cataloged top section can be supplied at same price.

NOTE: The dealer price on FK25G & FK25FG will be \$27.50 higher and on FK25G-SBH-1 & 2 and FK25G-SAH \$5.50 higher in following states: Ariz., Calif., Colo., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo., Alaska, Hawaii, & Alberta, B.C., & Sask., Can.

F.O.B. PEORIA, ILLINOIS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



No. 25 Fold-Over Towers  
PARTS BREAKDOWN PRICES

<u>PART NO.</u>	<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>FK25G (Ground Mounted)</u>			
3 - 25G tower sections	103.30	72.30	120
1 - 25AG-4 top section	40.25	28.15	31
1 - SB25G short base section	15.85	11.10	10
1 - Hinge section	78.60	55.00	56
1 - Boom (2 pcs.) w/sleeve	128.60	90.00	118
1 - Winch (#6810H)	18.10	12.65	7
1 - Winch plate w/2 saddle clamps	14.30	10.00	3
1 - A-clamp for top of boom	15.70	11.00	3
40' - 5/32" aircraft cable	8.60	6.00	2
2 - 1/8" cable clamps	.60	.42	
1 - 1/4" thimble	.20	.15	
4 - 7/16" x 2 1/4" bolts w/nuts	.85	.60	
8 - 5/16" x 2 1/4" bolts w/nuts	1.15	.80	
3 - 3/8" x 1" bolts w/nuts, countersunk	.25	.18	
6 - 5/16" x 1" bolts w/nuts	.45	.30	
2 - 1/4" x 1 1/4" U-bolts w/nuts	.45	.30	
2 - 3/8" x 2 1/2" bolts w/nuts	.30	.20	
1 - 3/8" x 3 1/2" bolt w/nut	.15	.11	
TOTALS .....	\$427.70	\$299.26	

FK25FG (Roof Mounted)

Complete FK25G with FR25G flat roof mount substituted for  
SB25G short base section

TOTALS ..... \$442.70 \$309.26

FK25G-SBH-1

1 - 25G section (to be added below hinge)	34.45	24.10	40
1 - Pulley w/2 saddle clamps	14.30	10.00	7
4 - 5/16" x 2 1/4" bolts w/nuts	.60	.40	
10' - Longer 5/32" aircraft cable	2.15	1.50	
(When ordered with FK25G or FK25FG)			
TOTALS .....	\$ 51.50	\$ 36.00	

FK25G-SBH-2

1 - 25G section (to be added below hinge)	34.45	24.10	40
1 - Pulley w/2 saddle clamps	14.30	10.00	7
4 - 5/16" x 2 1/4" bolts w/nuts	.60	.40	
50' - 5/32" aircraft cable	10.70	7.50	2
(For addition to existing FK25G or FK25FG)			
TOTALS .....	\$ 60.05	\$ 42.00	

FK25G-SAH

1 - 25G section (to be added above hinge) .....	\$ 34.45	\$ 24.10	40
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NOTE: Fold-over towers must be guyed. See complete guy kits on reverse side, as well as fold-over tower Specifications Sheet No. A-690722 showing how your particular requirement should be guyed.

NOTE: The dealer price on FK25G & FK25FG will be \$27.50 higher and on FK25G-SBH-1 & 2, and FK25G-SAH \$5.50 higher (also \$5.50 higher on #25 top, tower, and hinge sections) in the following states: Ariz., Calif., Colo., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo., Alaska, Hawaii, and Alberta, B.C., and Sask., Canada.

F.O.B. PEORIA, ILLINOIS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

(Hot-Dipped Galvanized Finish After Fabrication)

<u>PART NO.</u>	<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>FK45G - Ground Installation - Must be Guyed at Hinge</u>			
3 - 45G - 10' sections	570.00	400.00	520
1 - 45AG-4 - Top section - 7' length; upper end termin- ating in 11" dia. flat circular plate w/2½" dia. hole in center.			
1 - Hinge section - 10'			
1 - Boom (2 pieces)			
1 - Windlass and 40' of cable			

NOTE: All hardware for assembly of above included.

<u>GGK45G-1 - Ground Guy Kit - For Guying at HINGE ONLY When Using FK45G and When Using Section Above Hinge</u>			
185' - 1/4" E.H.S. galv. guy wire	115.00	80.00	60
24 - 1/4" cable clamps, malleable			
8 - 1/4" galv. thimbles			
4 - 1/2"x12" galv. turnbuckles, E&J			
4 - GAS-604 - Screw guy anchors			

<u>GGK45G-2 - Ground Guy Kit - For Guying at Hinge AND at Top When Using FK45G with Section Below Hinge and/or Above Hinge</u>			
500' - 1/4" E.H.S. galv. guy wire	195.00	135.00	108
48 - 1/4" cable clamps, malleable			
12 - 1/4" galv. thimbles			
8 - 1/2"x12" galv. turnbuckles, E&J			
4 - GAS-604 - Screw guy anchors			

<u>FK45FG - Flat Surface Installation - Must be Guyed at Hinge</u>			
Same as FK45G, except has FR45G flat roof mount added.	610.00	425.00	560

<u>FGK45G-1 - Flat Surface Guy Kit - For Guying at HINGE ONLY When Using FK45FG and When Using Section Above Hinge</u>			
Same as GGK45G-1, except does NOT have GAS-604 anchors.	68.00	48.00	32

<u>FGK45G-2 - Flat Surface Guy Kit - For Guying at Hinge AND at Top When Using FK45FG with Section Below Hinge and/or Above Hinge</u>			
Same as GGK45G-2, except does NOT have GAS-604 anchors.	147.00	103.00	80

MISCELLANEOUS ITEMS AVAILABLE FOR ABOVE TOWERS

TB-2 - Thrust bearing, ball bearing, self-aligning, for 2" O.D. tubing, bolts to A-4 top	21.45	15.00	8
AB - Hardwood bearing, w/2" hole & drilled to bolt to A-4 top	5.15	3.60	1
AS45G - Accessory shelf. Plate w/2½" hole to mount amateur rotor or mast bearing. Mounts inside tower sect.	15.75	11.00	9
FK45G-SBH-1 - Includes: 45G sect. to be added below hinge, 1 pulley & 10' longer cable. (When ordered w/FK45G or FK45FG.)	76.30	53.40	75
FK45G-SBH-2 - Includes: 45G sect. to be added below hinge, 1 pulley & 50' of cable. (For add. to existing FK45G or FK45FG.)	84.85	59.40	80
FK45G-SAH - 45G section, to be added above hinge	61.45	43.00	70

NOTE: Any cataloged top section can be supplied at same price.

NOTE: The dealer price on FK45G & FK45FG will be \$35.00 higher and on FK45G-SBH-1 & 2 and FK45G-SAH \$7.00 higher in the following states: Ariz., Calif., Idaho, Mont., Nev., Ore., Utah, Wash., Alaska, Hawaii, and Alberta, B.C., and Sask., Canada.

F.O.B. PEORIA, ILLINOIS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

(New Sheet)

No. 45 Fold-Over Towers  
PARTS BREAKDOWN PRICES

<u>PART NO.</u>	<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>FK45G (Ground Mounted)</u>			
3 - 45G tower sections	184.35	129.00	210
1 - 45AG-4 top section	71.45	50.00	52
1 - Hinge section	117.85	82.50	100
1 - Boom (2 pcs.) w/sleeve	150.00	105.00	128
1 - Winch (#6830H)	28.60	20.00	7
1 - Winch plate w/2 saddle clamps	15.70	11.00	3
1 - A-clamp for top of boom	17.15	12.00	5
40' - 5/32" aircraft cable	8.60	6.00	2
2 - 1/8" cable clamps	.60	.40	
1 - 1/4" thimble	.20	.15	
19 - 7/16" x 2 1/4" bolts w/nuts	4.10	2.85	
23 - 5/16" x 2 1/4" bolts w/nuts	3.30	2.30	
3 - 3/8" x 1" bolts w/nuts, countersunk	.25	.18	
6 - 5/16" x 1" bolts w/nuts	.45	.30	
4 - 1/4" x 1 1/4" U-bolts w/nuts	.85	.60	
2 - 7/16" x 2 1/2" bolts w/nuts	.45	.30	
1 - 3/4" x 3 1/2" boom pin w/cotter pin	.70	.50	
TOTALS .....	\$604.60	\$423.08	
<u>FK45FG (Roof Mounted)</u>			
Complete FK45G w/FR45G flat roof mount added ....	\$644.60	\$448.08	
<u>FK45G-SBH-1</u>			
1 - 45G section (to be added below hinge)	61.45	43.00	70
1 - Pulley w/2 saddle clamps	14.30	10.00	7
3 - 7/16" x 2 1/4" bolts w/nuts	.65	.45	
7 - 5/16" x 2 1/4" bolts w/nuts	1.00	.70	
10' - Longer 5/32" aircraft cable	2.15	1.50	
(When ordered with FK45G or FK45FG)			
TOTALS .....	\$ 79.55	\$ 55.65	
<u>FK45G-SBH-2</u>			
1 - 45G section (to be added below hinge)	61.45	43.00	70
1 - Pulley w/2 saddle clamps	14.30	10.00	7
3 - 7/16" x 2 1/4" bolts w/nuts	.65	.45	
7 - 5/16" x 2 1/4" bolts w/nuts	1.00	.70	
50' - 5/32" aircraft cable	10.70	7.50	
(For addition to existing FK45G or FK45FG)			
TOTALS .....	\$ 88.10	\$ 61.65	
<u>FK45G-SAH</u>			
1 - 45G section (to be added above hinge) .....	\$ 61.45	\$ 43.00	70
3 - 7/16" x 2 1/4" bolts w/nuts			
3 - 5/16" x 2 1/4" bolts w/nuts			

NOTE: Fold-over towers must be guyed. See complete guy kits on reverse side, as well as fold-over tower Specifications Sheet No. A-690722 showing how your particular requirement should be guyed.

NOTE: The dealer price on FK45G & FK45FG will be \$35.00 higher and on FK45G-SBH-1 & 2, and FK45G-SAH \$7.00 higher (also \$7.00 higher on #45 top, tower, and hinge sections) in the following states: Ariz., Calif., Colo., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo., Alaska, Hawaii, and Alberta, B.C., and Sask., Canada.

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PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



ROHN MANUFACTURING CO.  
PEORIA, ILLINOIS

Sept. 15, 1969

INSTALLATION INSTRUCTIONS FOR #25 FOLD-OVER TOWER

Selection of tower location: Select a position sufficiently clear of trees, wires, buildings, etc., to permit a free swing of the hinged portion of the tower; antenna and boom. The location should be suitable for placing four guy anchors at distances indicated on drawing.

Installation of base section: Dig a hole 24" square by approximately 36" deep. Spread about 2" of gravel in the bottom of the hole prior to setting the short base section; then set the base section on the gravel, being sure the correct end is up, and fill another 3" with gravel around the legs of the base. This allows the tower base legs to extend the required amount below the base of the concrete, thus allowing for drainage of moisture into the gravel. Before pouring the concrete, coat the base section in an area about 3" above and 3" below the space where the top of the concrete base will be, using a waterproof asphalt type material. If the tower is near a building, set the base so that two of the tower legs lie in a plane perpendicular to the wall of the building. This will cause the hinge axis to also be at right angles to the wall and the tower will fold without interference from the building. With the base thus set, pour the concrete around it and check its erectness with a carpenter's level on one or more of the legs of the tower. Crown the top of the concrete slightly to hasten water run-off. Flat surface installations naturally eliminate this paragraph.

Erection of the tower: After the concrete has hardened with the first section in place, continue with the second section. This is hastened if an erection fixture is used. An additional 10' tower section can be added below and above the hinged section (see drawing) to bring the total height of the tower to 58' or 68'.

Hinged section: With the shipping tab bolted closed, lift the hinged section into place, being sure to place the hinge on the correct side of the tower. Guy wires are then installed on the guying tabs near the hinge point (see drawing). The boom is then installed on the hinged section.

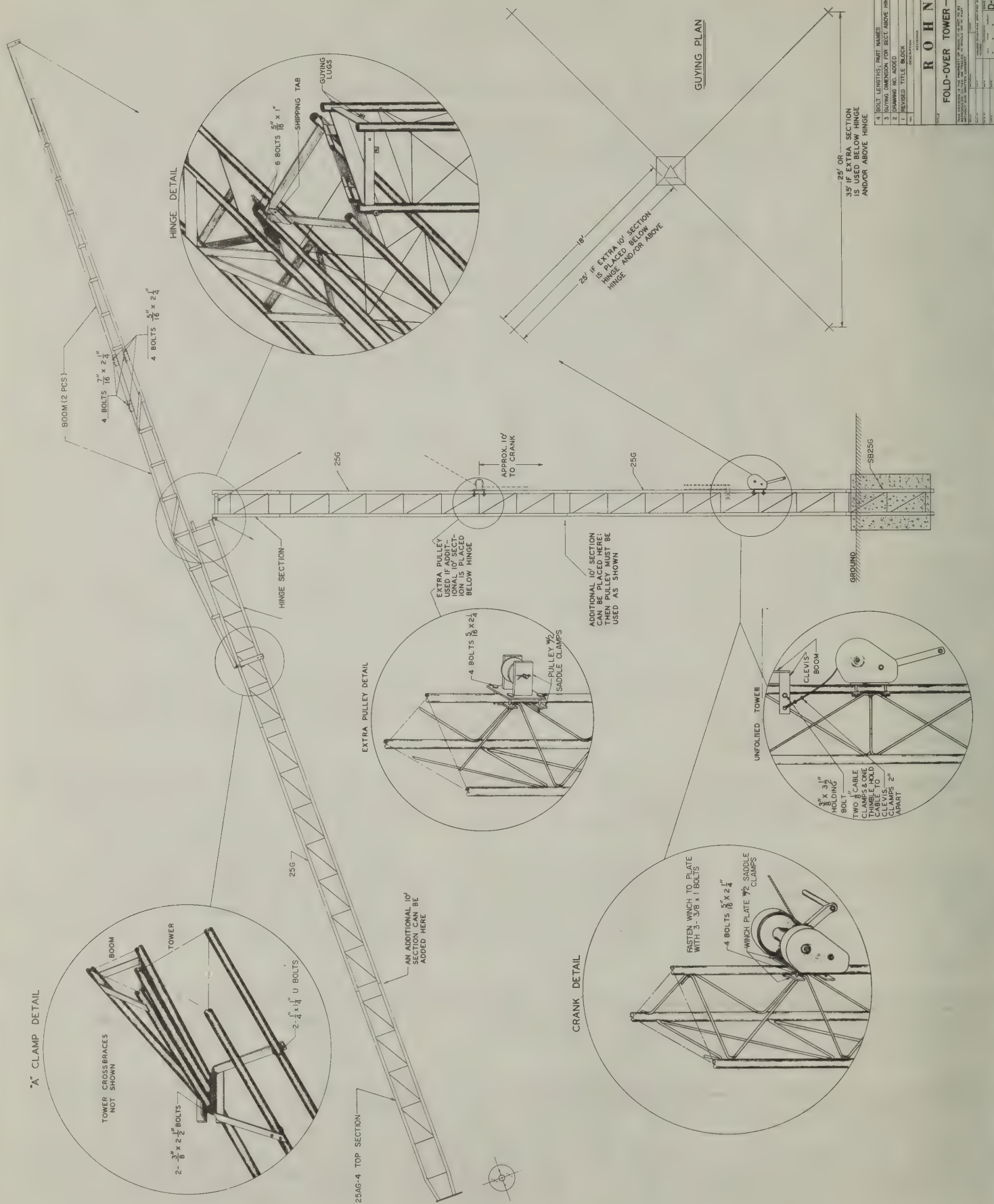
Assembly of boom: With the use of a long tapered punch, bring the bolt holes of the two parts of the boom into alignment. Be careful not to enlarge the bolt holes. Tighten the bolts until the sleeves are slightly flattened so they grip the tubing within.

Installation of boom (lever) section: First, leaving the hinge section bolted closed, hoist the boom into position and fasten it to the hinge section by means of the six 5/16" x 1" bolts as shown in "Hinge Detail" on the drawing. Next, secure the extreme top of the boom, using the "A" clamp with two 3/8" x 2-1/2" bolts and two U bolts (see drawing). Do not tighten the U bolts too tightly.

Installation of final sections: Erect the remaining sections in the usual manner. All bolts securing legs should be tightened enough to partially flatten the outer sleeve until it actually grips the leg within it.

Installation of reel and cable mechanism: Bolt the reel and cable mechanism to the tower legs of the lower section of the tower, just below the clevis on the boom, with the four 5/16" x 2-1/4" bolts as shown in the drawing. If an additional 10' tower section is placed below the hinge section, the extra pulley must be installed just below the clevis on the boom (see drawing). Cable must be secured with two cable clamps and one wire rope thimble to the boom clevis and with two cable clamps to the reel.

THE ABOVE INSTRUCTIONS ARE FACTORY TESTED. PLEASE FOLLOW CAREFULLY.



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ROHN

FOLD-OVER TOWER - FK25G

D-690603 RI



ROHN MANUFACTURING CO.  
PEORIA, ILLINOISINSTALLATION INSTRUCTIONS FOR #45 FOLD-OVER TOWER

Selection of tower location: Select a position sufficiently clear of trees, wires, buildings, etc., to permit a free swing of the hinged portion of the tower, antenna and boom. The location should be suitable for placing four guy anchors at distances indicated on drawing.

Installation of base section: Dig a hole 30" square by approximately 36" deep. Spread about 2" of gravel in the bottom of the hole prior to setting the first section; then set the section on the gravel, being sure the large sleeve end is down, and fill another 3" with gravel around the legs of the base. This allows the tower base legs to extend the required amount below the base of the concrete, thus allowing for drainage of moisture into the gravel. Before pouring the concrete, coat the base section in an area about 3" above and 3" below the space where the top of the concrete base will be, using a waterproof asphalt type material. If the tower is near a building, set the base so that two of the tower legs lie in a plane perpendicular to the wall of the building. This will cause the hinge axis to also be at right angles to the wall and the tower will fold without interference from the building. With the base thus set, pour the concrete around it and check its erectness with a carpenter's level on one or more of the legs of the tower. Crown the top of the concrete slightly to hasten water run-off. Flat surface installations naturally eliminate this paragraph.

Erection of the tower: After the concrete has hardened with the first section in place, continue with the second section. This is hastened if an erection fixture is used. An additional 10' tower section can be added below and above the hinged section (see drawing) to bring the total height to 54' or 64'.

Hinged section: With the shipping tab bolted closed, lift the hinged section into place, being sure to place the hinge on the correct side of the tower. Guy wires are then installed on the guying tabs near the hinge point (see drawing). The boom is then installed on the hinged section.

Assembly of boom: With the use of a long tapered punch, bring the bolt holes of the two parts of the boom into alignment. Be careful not to enlarge the bolt holes. Tighten the bolts until the sleeves are slightly flattened so they grip the tubing within.

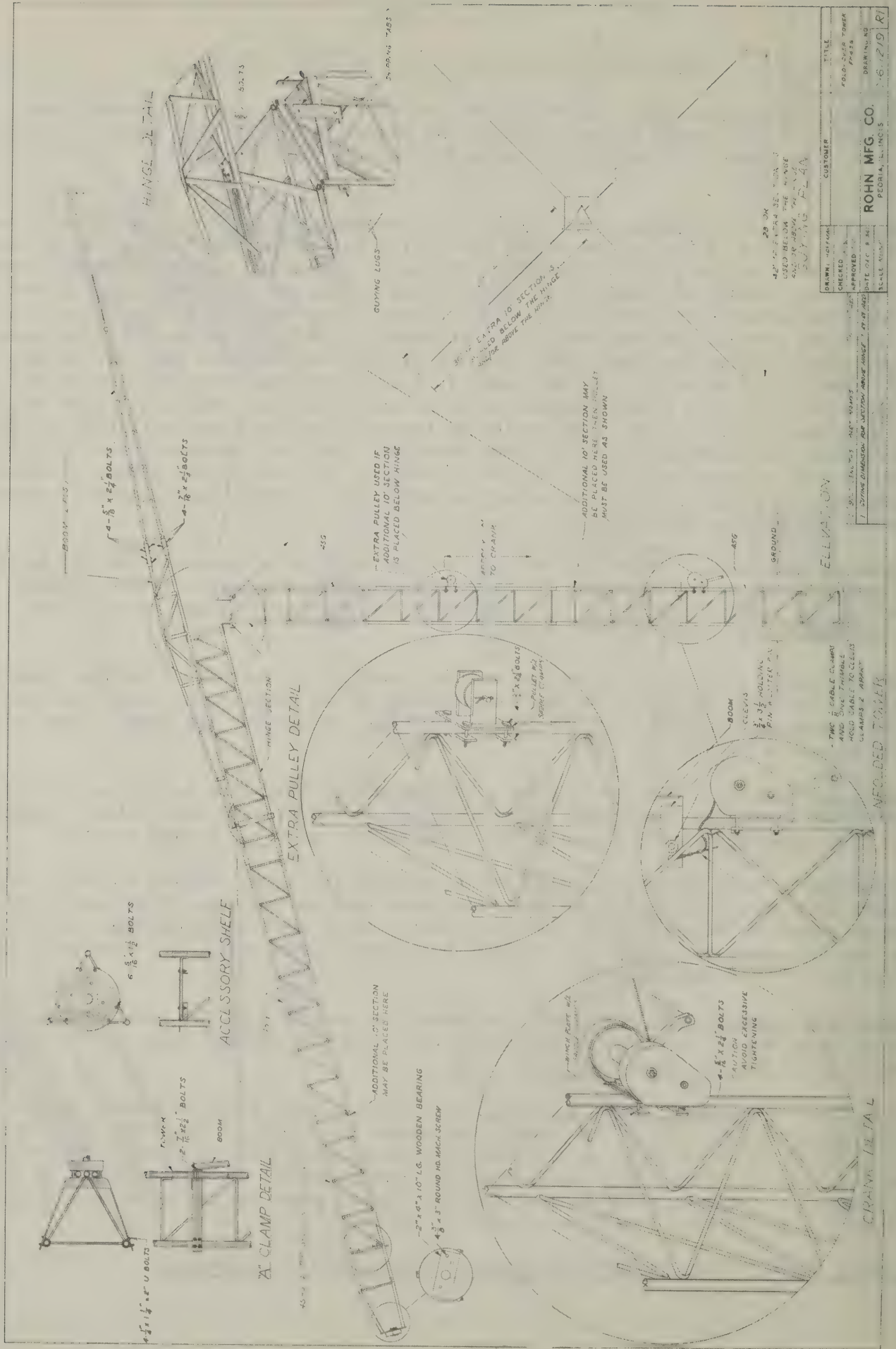
Installation of boom (lever) section: First, leaving the hinge section bolted closed, hoist the boom into position and fasten it to the hinge section by means of the six 5/16" x 1" bolts as shown in "Hinge Detail" on the drawing. Next, secure the extreme top of the boom, using the "A" clamp with two 1/2" x 2-1/2" bolts and four U bolts (see drawing). Do not tighten the U bolts too tightly.

Installation of final sections: Erect the remaining sections in the usual manner. All bolts securing legs should be tightened enough to partially flatten the outer sleeve until it actually grips the leg within it.

Installation of reel and cable mechanism: Bolt the reel and cable mechanism to the tower legs of the lower section of the tower, just above the clevis on the boom, with the four 5/16" x 2-1/4" bolts as shown in the drawing. If an additional 10' tower section is placed below the hinge section, extra pulley must be installed just above the clevis on the boom (see drawing). Cable must be secured with two cable clamps and one wire rope thimble to the boom clevis and with two cable clamps to the reel.

THE ABOVE INSTRUCTIONS ARE FACTORY TESTED. PLEASE FOLLOW CAREFULLY.





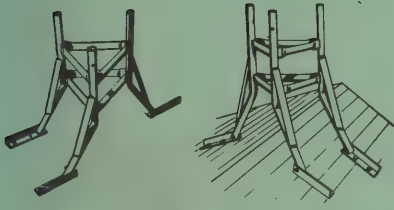
DATE	CHECKED	APPROVED	CUSTOMER	TITLE
1916			ROHN MFG. CO.	CRANE BOOM
1916			PEORIA, ILL. U.S.A.	CRANE BOOM
1916				CRANE BOOM

25 ON  
 1/2" 12" EXTRA SECTION  
 USED FROM THE ABOVE  
 CRANE BOOM  
 DRAWING PLAN

1. 1/2" 12" EXTRA SECTION  
 2. 1/2" 12" EXTRA SECTION  
 3. 1/2" 12" EXTRA SECTION  
 4. 1/2" 12" EXTRA SECTION  
 5. 1/2" 12" EXTRA SECTION  
 6. 1/2" 12" EXTRA SECTION  
 7. 1/2" 12" EXTRA SECTION  
 8. 1/2" 12" EXTRA SECTION  
 9. 1/2" 12" EXTRA SECTION  
 10. 1/2" 12" EXTRA SECTION

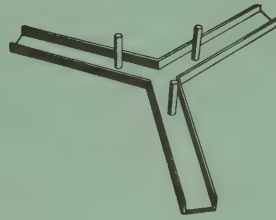
NEEDED TO BE  
 TWO 1/2" CABLE CLAMP  
 AND ONE TRUSS  
 AND ONE TRUSS  
 CLAMP & APPROP

# Tower Accessories



## PEAK ROOF MOUNT

Heavy duty for quick, secure mounting of tower to top of peak roof. Base mounting flanges hinged . . . permits mounting to any angle roof. Flanges fastened to roof with 2 lag screws in each flange. Adaptable as regular short-height roof installations. **Note:** towers mounted on this base must be bracketed or guyed.

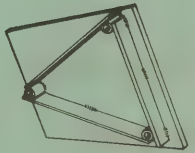


## FLAT ROOF MOUNT

For mounting tower on any type flat surface. Three solid steel projections permit first section of tower to be mounted directly onto roof mount by inserting usual bolts. Use when concrete footing is impossible or unwanted.

**Note:** towers mounted on this base must be bracketed or guyed.

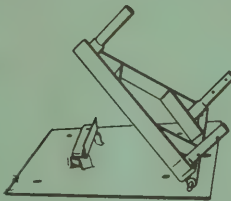
## DRIVE-IN BASE PLATE



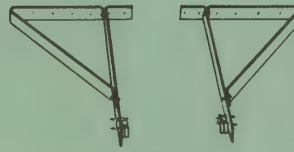
Base plate is set on top of ground. Three - 4' drive rods driven through base into ground. Instant, on-the-spot erection.

**Note:** towers mounted on this base must be bracketed or guyed.

## HINGED BASE PLATE



Designed to permit easy erection of "ground assembled" tower . . . no need for climbing. Holes are provided in the plate for anchor bolting to a firm base such as a concrete slab. **Note:** towers mounted on this base must be bracketed or guyed.

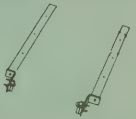


HB - PT

## UNIVERSAL ADJUSTABLE HOUSE BRACKET

This unit fits all towers having 1" side rails. Spacing between wall and tower adjustable from 12" to 24". Bracket's rugged universal design adapts it to many installations that the standard HB bracket does not satisfy. Also affords greater opportunity to fasten through siding to studs on both sides of the bracket.

## UNIVERSAL EAVE BRACKET

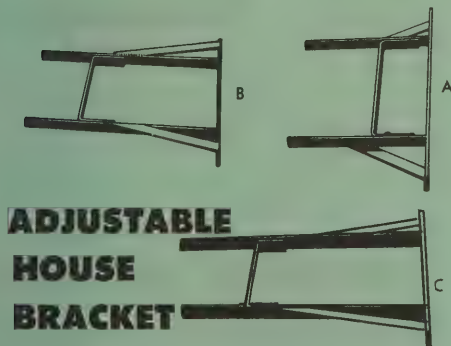


Used for under or over the eave mounting, this bracket assures more stability than a wall mounted bracket because it fastens higher on the tower and its free length can be shorter. The U-bolt ends can be swiveled or the long ends bent to match any pitch. Its two piece design gives the installer ample opportunity to fasten directly to a rafter. Holes are arranged to give 16" and 24" spacing. Fits all towers with 1" - 1 1/4" side rails.

## EAVE BRACKET

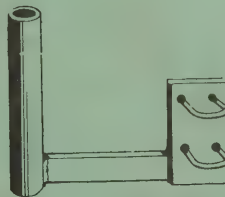


Specially designed eave bracket for use under eaves in tower installation. Fastens quickly and easily giving firm, secure support to tower.



## ADJUSTABLE HOUSE BRACKET

For added support and to prevent adverse effects from freezing and loose ground. Mount bracket against side of house. Center clamp is removed and placed around tower and fastened with two bolts. Center bracket is adjustable. Type A adjustable from 1" to 15"; type B from 15" to 24". type C from 24" to 36".



## ROTOR POST

Rotor post attaches to tower leg with 2 U-bolts. Quickly installed and may be swiveled about the leg and moved up and down to positions suitable for all popular type rotators.



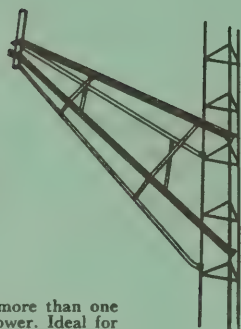
## RUBBER TOWER GROMMETS

Form a water-dirt-tight seal on the top of towers where rotatable antenna mast passes through tower bushing. Eliminates rotator slow-up due to friction or freezing. Fits all standard towers with 1 1/4" mast tubing.

**FOR PRICES AND PART NUMBERS, SEE TOWER CATALOG SHEETS**



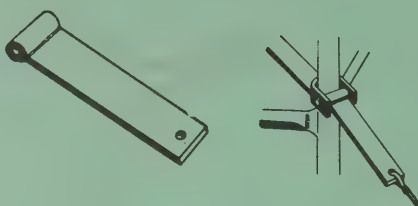
# Tower Accessories



## SIDE ARM

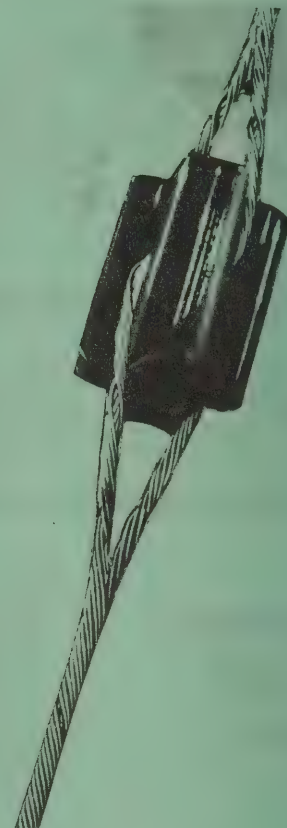
## MOUNT

Available for placing more than one antenna on a Rohn Tower. Ideal for commercial and service installations where more than one antenna is required. Guying lug provided on out-board end.



## TORQUE BAR

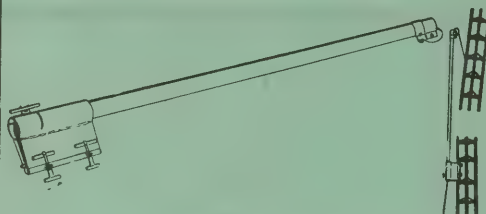
Use with Rohn guying bracket. Attaches to guying pinion. Prevents twisting and turning . . . adds strength to your tower. Recommended whenever guying bracket is used.



## GUY-GRIP dead-ends



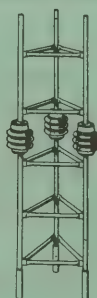
## SCREW ANCHOR



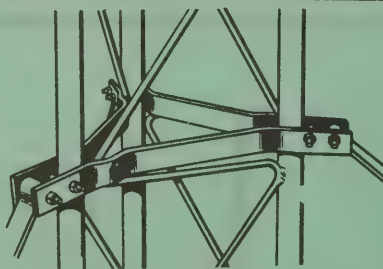
## ALL-PURPOSE ERECTION FIXTURE

Light weight aluminum construction without sacrificing sturdiness. Bottom part of fixture attaches to tower side rail permitting next section to be pulled up by rope through the pulley mechanism.

## INSULATOR SECTION

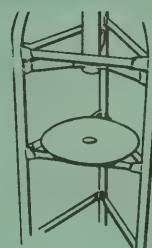


Permits the tower to be used as guyed "series fed" vertical radiators by amateur or commercial stations. May be installed in a concrete base or between regular sections at some distance up the tower. Individual insulators are rated at 7.5 KV; wet flashover voltage 40 KV.



## GUYING ASSEMBLY

Specially made guy bracket for ROHN towers using "Zig Zag" design. Makes guying easier and better. Takes strain off of tower legs and allows equal distribution of pull throughout bracket.



## ACCESSORY SHELF

Circle plate with 2 1/4" hole to mount heavy rotor on mast bearing. Mount inside of tower.

## ACCESSORY PLATFORM

Rectangular platform for use on top of straight tower section for mounting accessories.



**FOR PRICES AND PART NUMBERS, SEE TOWER CATALOG SHEETS**

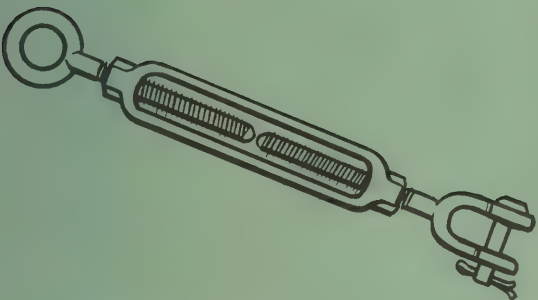
*Designed and Manufactured Exclusively By:*

**ROHN Manufacturing Co**

Peoria, Illinois

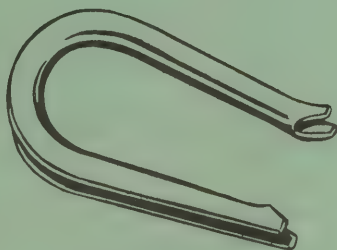


# Accessories for Communication Towers



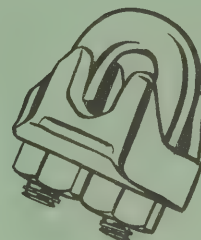
## TURN BUCKLES "EYE AND JAW" TYPE

Heavy-duty drop-forged weldless turn buckles for guying towers. Hot dipped galvanized throughout. "Eye" on one end with convenient "jaw" on other end for fast, convenient installation.



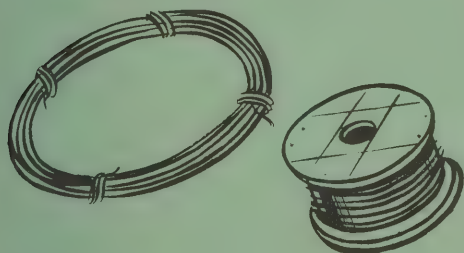
## WIRE ROPE THIMBLES

These thimbles are ideally suited for guy wires when guying towers. Have rounded points and are deep scored. Hot dipped galvanized.



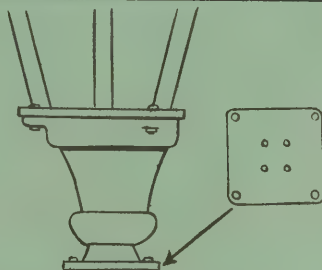
## CABLE CLAMPS

Best quality iron base with high strength steel U-clamps. Hot dipped galvanized.



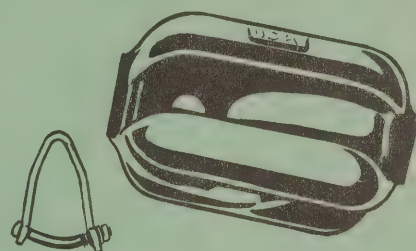
## GUY WIRE

Double galvanized, EXTRA HIGH STRENGTH guy wire. Full 7 wire strand and preformed. Available in variety of "strength in pounds" rating, which is the important factor in determining the proper guy wire to use. In coils or in reels.



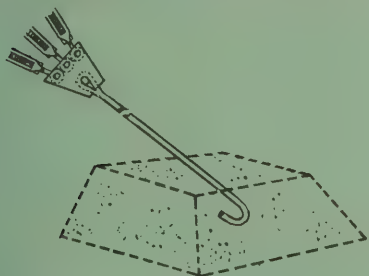
## BASE INSULATOR, (Single Type)

Special base insulator suitable for use with towers. Ready drilled holes for easy attachment of tower legs. Also available with drilled footing plate for fastening onto concrete anchor bolts.



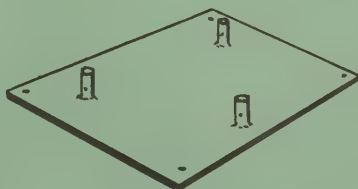
## STRAIN INSULATOR

Heavy-duty strain insulator made of porcelain. Also available with insulator clevis with bolt for use in fastening.



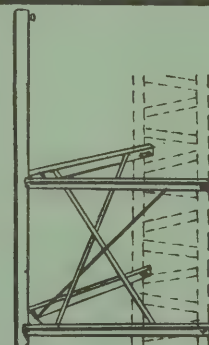
## GUY ANCHOR—CONCRETE

Specially made guying anchor for setting in concrete base. Ready for fastening turnbuckles. Excellent assembly for quickly and efficiently guying towers. Complete with twin equalizer plates.



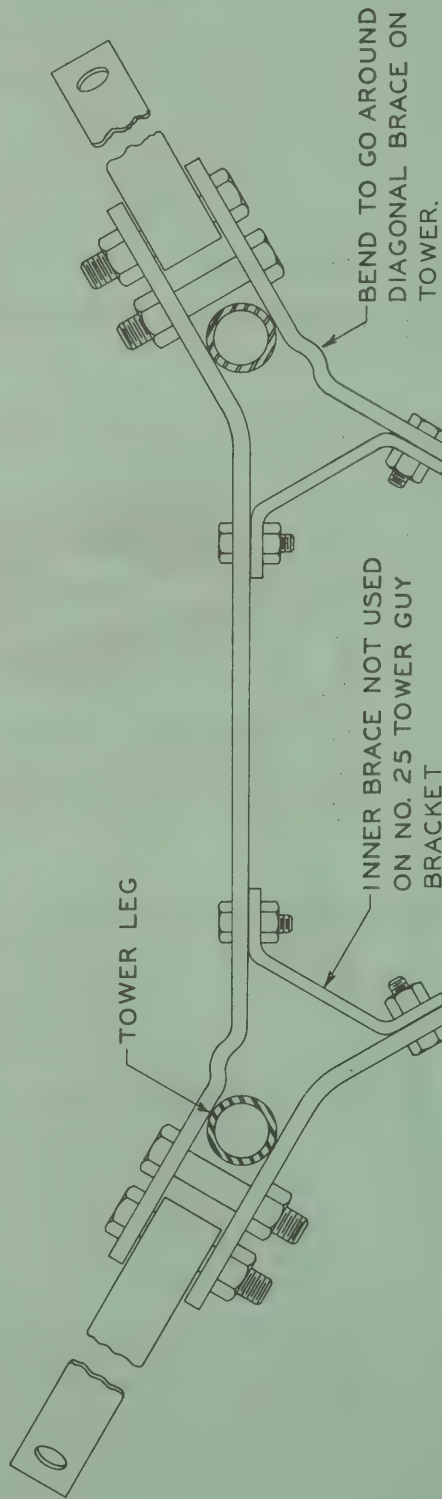
## BASE PLATE—CONCRETE (BPC)

Steel base plate for mounting tower on concrete slab. Ready drilled for anchor bolts and comes complete with 3 stubs already drilled for quick fastening to tower legs. **Note:** towers mounted on this base must be bracketed or guyed.



## SIDE ARM

Specially designed short side arm for attaching to tower leg for mounting additional communication antennas or when tower top must be used for lighting. Various sizes available to fit the requirements for different types of antenna.



#### BOLT REQUIREMENT

NO. 25 - 6-3/8 x 2 1/2 N.C.

NO. 45 - 6-3/8 x 1 1/4 N.C.

6-5/8 x 3/4 N.C.

NO. 55 - 6-3/8 x 1 1/4 N.C.

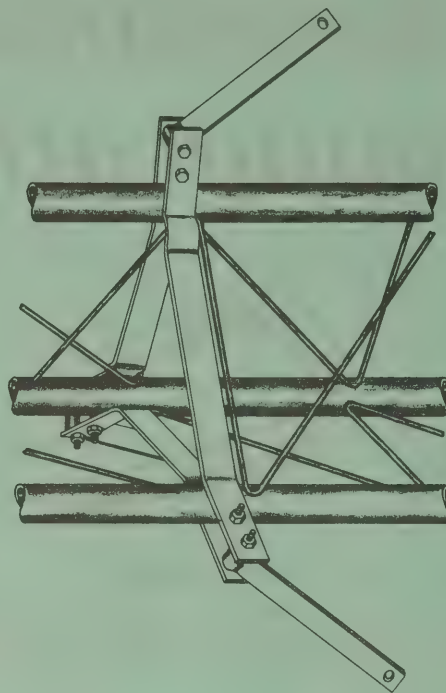
6-5/8 x 3/4 N.C.

#### PART NOS.

\*GB\*-BRACKET w/ SLEEVES

\*GA\*-BRACKET w/ TORQUE BARS

NOTE: TORQUE BARS ARE NOT USED ON TOWERS THAT HAVE GUY INSULATORS WITH CLEVIS ATTACHMENTS. USE BOLT SLEEVES TO ATTACH INSULATORS TO BRACKET.



#### GUYING ASSEMBLY



TORQUE BAR

1	CHANGED	BOLT REQUIREMENTS	8-4-71	BY	OK
NO.	DESCRIPTION		DATE	BY	
REVISIONS					
TITLE					
R O H N					
TYPICAL GUY ASSEMBLY					
THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT OUR WRITTEN CONSENT.					
SCALE	NONE	DATE	4-25-68	FILE NO.	
BY	A. JOHNSON	DATE	4-25-68	FILE NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE GIVEN IN	INCHES		TOLERANCES		ANGLES
	DEC	FRACTION	DEC		ANGLES
	±	±	±		±
APP'D	J.H.	DATE	4-25-68	DWG. NO.	C-680425
					R

#### TYPICAL GUY BRACKET ASSEMBLY

NO. 25, 45, & 55

ACCESSORIES

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>GUY WIRE GALVANIZED 7-STRAND - PREFORMED</u>				
1/8" H.S.	1/8" guy wire - high strength 1,330 lbs. breaking strength	62.00/Mft	43.00/Mft	30/Mft
3/16" E.H.S.	3/16" guy wire - extra high strength 3,990 lbs. breaking strength	82.00/Mft	57.00/Mft	68/Mft
1/4" E.H.S.	1/4" guy wire - extra high strength 6,650 lbs. breaking strength	120.00/Mft	84.00/Mft	120/Mft
5/16" E.H.S.	5/16" guy wire - extra high strength 11,200 lbs. breaking strength	179.00/Mft	125.00/Mft	205/Mft
3/8" E.H.S.	3/8" guy wire - extra high strength 15,400 lbs. breaking strength	229.00/Mft	160.00/Mft	273/Mft
7/16" E.H.S.	7/16" guy wire - extra high strength 20,800 lbs. breaking strength	316.00/Mft	221.00/Mft	399/Mft
1/2" E.H.S.	1/2" guy wire - extra high strength 26,900 lbs. breaking strength	399.00/Mft	279.00/Mft	517/Mft
9/16" E.H.S.	9/16" guy wire - extra high strength 35,000 lbs. breaking strength	518.00/Mft	362.00/Mft	671/Mft
5/8" E.H.S.	5/8" guy wire - extra high strength 42,400 lbs. breaking strength	648.00/Mft	453.00/Mft	813/Mft

SPECIAL GALVANIZED TURNBUCKLES (HIGH STRENGTH)

3/8" T.B.	3/8" x 6" turnbuckle	- eye & eye	3.85	2.70	1
	6,000# ultimate strength	- eye & jaw	4.35	3.05	1
1/2" T.B.	1/2" x 12" turnbuckle	- eye & eye	7.15	5.00	2
	11,000# ultimate strength	- eye & jaw	7.70	5.40	2
5/8" T.B.	5/8" x 12" turnbuckle	- eye & jaw	10.95	7.65	3
	17,500# ultimate strength				
3/4" T.B.	3/4" x 12" turnbuckle	- eye & jaw	16.15	11.30	5
	26,000# ultimate strength				
7/8" T.B.	7/8" x 12" turnbuckle	- eye & jaw	22.85	16.00	8
	36,000# ultimate strength				
1" T.B.	1" x 12" turnbuckle	- eye & jaw	28.10	19.65	10
	50,000# ultimate strength				
1 1/4" T.B.	1 1/4" x 12" turnbuckle	- eye & jaw	45.70	32.00	19
	76,000# ultimate strength				

NOTE: To arrive at safe working load of guy wire and turnbuckles, appropriate safety factor must be applied.



ACCESSORIES

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>HOT-DIPPED GALVANIZED CABLE CLAMPS</u>				
1/8" C.C.M.	1/8" cable clamp, malleable	.30	.21	3/100
3/16" C.C.M.	3/16" cable clamp, malleable	.35	.25	5/100
3/16" C.C.F.	3/16" cable clamp, forged	1.14	.80	15/100
1/4" C.C.M.	1/4" cable clamp, malleable	.42	.30	9/100
1/4" C.C.F.	1/4" cable clamp, forged	1.35	.95	25/100
5/16" C.C.F.	5/16" cable clamp, forged	1.45	1.00	30/100
3/8" C.C.F.	3/8" cable clamp, forged	1.65	1.15	41/100
7/16" C.C.F.	7/16" cable clamp, forged	1.80	1.25	65/100
1/2" C.C.F.	1/2" cable clamp, forged	1.85	1.30	75/100
9/16" C.C.F.	9/16" cable clamp, forged	2.00	1.40	85/100
5/8" C.C.F.	5/8" cable clamp, forged	2.15	1.50	100/100

HOT-DIPPED GALVANIZED THIMBLES

1/4" Th.	For 1/8", 3/16", 1/4" wire	.21	.15	4/100
3/8" Th.	For 5/16", 3/8" wire	.28	.20	8/100
1/2" Th.	For 7/16", 1/2" wire	.43	.30	14/100
5/8" Th.	For 9/16", 5/8" wire	1.00	.70	36/100
3/8" Th.H	Heavy duty thimble (use w/1/4" & 5/16" wire)	.71	.50	25/100
1/2" Th.H	Heavy duty thimble (use w/3/8" & 7/16" wire)	1.30	.90	50/100
5/8" Th.H	Heavy duty thimble (use w/1/2" & 9/16" wire)	1.65	1.15	75/100
3/4" Th.H	Heavy duty thimble (use w/5/8" wire)	2.95	2.05	150/100

SERVING TOOL

CST-1	Serving tool	14.30	10.00	3
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HOT-DIPPED GALVANIZED ROUND PIN ANCHOR SHACKLES

3/8" S	1 ton safe working load	1.85	1.30	30/100
1/2" S	2 ton safe working load	2.80	1.95	74/100
5/8" S	3 1/4 ton safe working load	4.65	3.25	144/100
3/4" S	4 3/4 ton safe working load	6.30	4.40	216/100
7/8" S	6 1/2 ton safe working load	8.50	5.95	337/100

GUY INSULATORS

502	Guy strain insulator, closed end type 10,000 lbs. strength	2.50	1.75	1
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INSULATOR CLEVISES

J-705	Use with 502, 7M lbs. strength, 4" length	3.10	2.15	82/100
J-726	Use with 502, 13M lbs. strength, 4" length	5.00	3.50	128/100

ACCESSORIES

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>CONCRETE ANCHORS</u>				
GAC-25-3	5/8"x5' rod with 3-hole twin equalizer plates (EP-2534-3)	12.85	9.00	11
GAC-25-5	5/8"x5' rod with 5-hole twin equalizer plates (EP-2534-5)	15.70	11.00	12
GAR-25	5/8"x5' rod only with eye	9.30	6.50	8
EP-2534-3	3-hole twin equalizer plates w/N&B	5.00	3.50	3
EP-2534-5	5-hole twin equalizer plates w/N&B	7.85	5.50	4
GAC-34-33		26.00	18.00	22
GAC-56-33		46.00	32.00	51
GAC-57-33		97.00	68.00	115
GAC-57-33SS		79.00	55.00	89
GAC-58-33		150.00	105.00	195
GAC-59-33		323.00	226.00	410
GAC-34-55		30.00	21.00	25
GAC-56-55		53.00	37.00	56
GAC-57-55		106.00	74.00	125
GAC-57-55SS		90.00	63.00	102
GAC-58-55		173.00	121.00	215
GAC-59-55		353.00	247.00	445
GAC-75-1		24.00	17.00	25
GAC-75-3		30.00	21.00	30
GAC-75-5		37.00	26.00	35
GAC-100-1		46.00	32.00	45
GAC-100-3		53.00	37.00	55
GAC-100-5		60.00	42.00	65

For torque ears, add suffix "T" to part number and add \$21.00 to the dealer price of each anchor.

WALL ANCHORS

GAW-25	Threaded wall eye anchor (rod only) 5/8"x18" with 5"x5" retaining plates and nuts	9.30	6.50	3
GAWP-25-3	GAW-25 with 3-hole twin equalizer plates (EP-2534-3)	12.85	9.00	6
GAWP-25-5	GAW-25 with 5-hole twin equalizer plates (EP-2534-5)	15.70	11.00	7

CONCRETE BASE BOLTS (w/Double Nuts) & PIER PINS

1/2" x 12" BB	Base bolt	2.15	1.50	1/2
5/8" x 12" BB	Base bolt	2.60	1.80	1
3/4" x 12" BB	Base bolt	3.00	2.10	1
3/4" x 16" BB	Base bolt	3.85	2.70	1 1/2
7/8" x 16" BB	Base bolt	4.95	3.45	3
3/4" x 12" PP	Pier pin	2.50	1.75	1
7/8" x 16" PP	Pier pin	4.10	2.85	3
1" x 16" PP	Pier pin	5.35	3.75	3

EARTH SCREW ANCHOR

GAS-604	6" screw plate with 5/8"x4' rod and eye (holding power, 2500 lbs.)	11.45	8.00	7
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<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>GROUNDING KITS</u>				
BGK	Base Grounding Kit 1 - 5/8" x 8' copper rod 1 - Brass tower attachment lug w/hdw. 1 - Brass rod clamp 10'- #4 solid copper wire	22.85	16.00	10
BGKE	Base Grounding Kit 1 - 5/8" x 8' galvanized rod 1 - Tower attachment lug w/hdw. 1 - S-58 rod clamp 5'- #6 solid copper wire	12.15	8.50	10
AGK	Anchor (Wire) Grounding Kit (For 3 Anchors) 3 - 5/8" x 8' copper rods 3 - Brass rod clamps 9 - Guy wire ground clamps 30'- #4 stranded copper wire	85.70	60.00	30
RGK	Anchor Rod Grounding Kit (For 3 Anchors) 3 - 5/8" x 8' copper rods 3 - Brass rod clamps 3 - Brass attachment lugs w/hdw. 15'- #4 solid copper wire	64.30	45.00	24
AGKE	Anchor (Wire) Grounding Kit (For 3 Anchors) 3 - 5/8" x 8' galvanized rods 3 - S-58 rod clamps 9 - Guy wire ground clamps 30'- #6 solid copper wire	55.70	39.00	30
RGKE	Anchor Rod Grounding Kit (For 3 Anchors) 3 - 5/8" x 8' galvanized rods 3 - S-58 rod clamps 3 - Attachment lugs w/hdw. 15'- #6 solid copper wire	31.45	22.00	24
<u>GROUND RODS &amp; ACCESSORIES</u>				
GR8G	5/8" x 8' galvanized rod with ground wire clamp	6.10	4.25	8
GR8C	5/8" x 8' copper rod with ground wire clamp	17.15	12.00	8
GR10C	3/4" x 10' threaded copper rod with ground wire clamp	32.85	23.00	14
3/4C	3/4" ground rod coupling (to join GR10C together and required when 3/4D used)	4.65	3.25	1/2
3/4D	3/4" ground rod driver (for use w/GR10C)	2.85	2.00	1/2
<u>COPPER WIRE</u>				
CW4S	#4 solid	.30/ft	.21/ft	125/Mft
CW4ST	#4 stranded	.31/ft	.22/ft	125/Mft
CW2S	#2 solid	.46/ft	.32/ft	200/Mft
CW2ST	#2 stranded	.49/ft	.34/ft	200/Mft



ACCESSORIES

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>GUY GRIPS (DEAD END) FOR 7-STRAND GALVANIZED GUY WIRE COMPLETE WITH END SLEEVE</u>				
BG-2142	3/16" guy grip, 23" length, complete with GC-65303 end sleeve	2.50	1.75	28/100
BG-2144	1/4" guy grip, 27" length, complete with GC-65136 end sleeve	2.85	2.00	38/100
BG-2146	5/16" guy grip, 33" length, complete with GC-65128 end sleeve	3.50	2.45	66/100
BG-2147	3/8" guy grip, 37" length, complete with GC-65264 end sleeve	4.15	2.90	95/100
BG-2148	7/16" guy grip, 40" length, complete with GC-65265 end sleeve	6.15	4.30	140/100
BG-2115	1/2" guy grip, 50" length, complete with GC-65266 end sleeve	8.10	5.65	229/100
BG-2116	9/16" guy grip, 55" length, complete with GC-65267 end sleeve	10.35	7.25	342/100
BG-2111	5/8" guy grip, 64" length, complete with GC-65268 end sleeve	26.95	18.85	355/100

NOTE: See drawing for procedure to apply end sleeves on guy grips. End sleeves must be used on all guy grips.

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PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

TO ACHIEVE MAXIMUM COVERAGE WITH THE END SLEEVE, THE APPLICATION SHOULD BE CONDUCTED IN THE FOLLOWING MANNER:

(BE SURE TO SELECT PROPER SIZE END SLEEVE)



1

PLACE THE SLOT SIDE OF THE  
END SLEEVE OVER THE LONG  
LEG OF THE DEAD-END.



2

DRIVE THE SLEEVE DOWNWARD UNTIL THE RODS OF SHORT LEG ARE COMPLETELY COVERED.



3

THE RODS OF THE LONG LEG SHOULD BE EVEN WITH, OR MAY EXTEND ABOVE, THE TOP EDGE OF THE SLEEVE.

NO.	DESCRIPTION		DATE	BY
REVISONS				
TITLE		<h1>ROHN</h1> <h2>APPLICATION PROCEDURE</h2> <h2>FOR GUY-GRIP END SLEEVE</h2>		
<p>THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.</p>		FILE NO.		
SCALE	MATERIAL	FINISH	WT	
NONE DW BY ARCHANG C'D BY PLAN	DATE 8-9-70 DATE DATE 9-70	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE GIVEN IN INCHES TOLERANCES DEC    FRAC    ANGLES ±    ±    ±		DWG. NO. B-700607

# ROHN No. 45 COMMUNICATION TOWER

*This communication tower is an 18 inch triangular pattern suitable for heights to 300 feet with proper guying!*

## DESIGN

ROHN No. 45 tower is designed in an 18 inch equilateral triangular pattern. The three legs of the tower are of heavy, 14 gauge, special quality steel. The cross bracing is the ROHN "zig-zag" design using a continuous, solid steel rod, electric welded to side rails every 15 inches. All sections are 10 feet in length.

## USAGE

This tower is suitable for mounting communication antenna under normal conditions for all heights up to a maximum of 300 feet. See specification sheets for complete guying and wind load information.

## CONSTRUCTION

Entire tower is accurately constructed, utilizing precision machines and then electric welded throughout. Workmanship and materials are of the highest quality available and fully conforming to specifications.

## FINISH

ROHN No. 45 tower sections are completely hot-dipped galvanized *after fabrication* to give permanent protection against corrosion. Because sections are galvanized as the last operation, all points of welding and other points of construction are fully covered with molten zinc that continues to seal itself should there ever be any breakage on the surface!

## SPECIAL NOTE!

The No. 45 tower sections are completely interchangeable with the ROHN No. 40 tower sections!

## TO ORDER:

See reverse side of this sheet for catalog numbers, etc. Also note guy sheets and other specification data.

ROHN No. 45 Tower

*Exclusive Design and Manufactured only by*

# ROHN

*Manufacturing Co*

Peoria, Illinois



#45 TOWER

PART NO.		LIST	SUGG'D. DEALER	WT.
45G	10' tower section	61.45	43.00	70
45AG	9' top section	64.30	45.00	52
45AG-1	Top section. Mast support tube is 1½" galv. pipe, threaded on top end and projecting 12" above apex of side rails.	71.45	50.00	60
45AG-2	Top section. Mast support tube is 2½" O.D. tubing, 36" total length, extending 18" above apex of side rails.	71.45	50.00	60
45AG-3	Top section. Mast support tube is 2½" O.D. tubing, extending 12" above apex of side rails. A 2" O.D. antenna stub will fit snugly inside support tube.	71.45	50.00	60
45AG-4	7' top section. Upper end terminates in 11" dia. flat, circular plate with 2½" dia. hole in center.	71.45	50.00	52
45AG-5	Top section. Mast support tube is 2-3/4" O.D. and 2-9/16" I.D. tubing, 18" total length.	71.45	50.00	60
45TG	10' tapered base section	85.00	60.00	90
45RG	10' insulator section for 45G tower (includes 3 #10470 insulators)	171.45	120.00	104
5545G	20' adapter section for joining 45G & 55G	178.60	125.00	160
HCG-45G	H-frame section with hardware	85.00	60.00	80
LSC-45G	H-frame ladder section with hardware	42.85	30.00	35
APL45G	Beacon plate	25.00	17.50	20
SB45G	5' short base section for concrete	35.70	25.00	35
BPC45G	Concrete base plate	32.85	23.00	38
3/4"x12" PP	Pier pin (for BPC45G or 45TG - 1 required)	2.50	1.75	1
FR45G	Flat roof mount	35.35	24.75	40
RP45G	Rotor post	3.55	2.50	3
AS45G	Accessory shelf. Plate for mounting Ham "M" rotor or mast bearing. Mounts inside of tower.	15.75	11.00	9
GA45G	Guy assembly (bracket w/torque bars)	28.60	20.00	23
GB45G	Guy bracket only	20.00	14.00	16
HB45AG	Adjustable house bracket (up to 15")	9.60	6.70	10
HB45BG	Adjustable house bracket (15" to 24")	12.70	8.90	13
HB45CG	Adjustable house bracket (24" to 36")	13.80	9.65	19
TB50	Tower bushing - 1½" I.D. x 2" O.D.	1.60	1.10	½
TB75	Tower bushing - 1½" I.D. x 2" O.D.	1.60	1.10	½
S-1	Rubber grommet (1 pc.)		Discontinued	
L-2	Rubber grommet (2 pcs.)		Discontinued	
AB	Amateur bearing - 2"x4"x10" hardware for use with 45AG-4 top	5.65	3.95	1
TB-2	Thrust bearing, ball bearing, self-aligning, for 2" O.D. tubing, bolts to 45AG-4 top	23.60	16.50	8
SAB45G-2	Side arm bracket for top antenna mounting alongside beacon	26.25	18.35	17
SA45G-224	24" side arm with 36", 2½" O.D. support tube	41.00	28.75	22
SA45G-524	24" side arm with 18", 2-9/16" I.D. support tube	41.00	28.75	18
TA45	Torque arm stabilizer assembly	65.70	46.00	58
45TDM-2	Top dish mount w/2" O.D. mast	52.85	37.00	47
45TDM-25	Top dish mount w/2½" O.D. mast	62.85	44.00	56
45TDM-2SP	Top dish mount w/2" standard pipe	64.30	45.00	57
45TDM-2EH	Top dish mount w/2" EH pipe	74.30	52.00	66
45TDM-25SP	Top dish mount w/2½" standard pipe	80.00	56.00	71
45TDM-25EH	Top dish mount w/2½" EH pipe	92.85	65.00	82
DM45G-2	Face dish mount w/2" (2-3/8" OD) 5' long standard pipe	60.00	42.00	52
DM-45-4	Face dish mount w/4" (4½" OD) 5' long standard pipe	100.00	70.00	88
EF-25-45	Aluminum erection fixture, 12 ft. long (fits all models with 1½" side rails)	101.10	70.75	18
P-25-45	Pole only for EF-25-45	56.15	39.30	10
H-25-45	Head only for EF-25-45	56.15	39.30	8

#45G

Reference Sheet for Complete Guyed #45G Tower

DEALER PRICES

<u>TOWER HEIGHT</u>	<u>30 lbs./sq.ft. WIND LOAD</u>	<u>40 lbs./sq.ft. WIND LOAD</u>	<u>50 lbs./sq.ft. WIND LOAD</u>
50'	371.00	398.00	398.00
60'	418.00	450.00	450.00
70'	463.00	494.00	558.00
80'	544.00	609.00	609.00
90'	609.00	657.00	657.00
100'	663.00	717.00	789.00
110'	708.00	845.00	845.00
120'	813.00	897.00	897.00
130'	868.00	947.00	1031.00
140'	885.00	1003.00	1085.00
150'	970.00	1146.00	1146.00
160'	1143.00	1232.00	1296.00
170'	1168.00	1285.00	1353.00
180'	1218.00	1404.00	1494.00
190'	1276.00	1466.00	1559.00
200'	1324.00	1523.00	1709.00
210'	1432.00	1574.00	
220'	1486.00	1729.00	
230'	1688.00	1786.00	
240'	1717.00	1955.00	
250'	1695.00		
260'	1746.00		
270'	2004.00		
280'	2055.00		
290'	1992.00		
300'	2048.00		

Above prices include all items listed on parts sheets.

"Ground" or "roof" towers same price. When ordering, specify "roof" or "ground". See guy chart and parts list for details.

Prices for above towers are subject to change based upon current individual item prices. Prices subject to change without notice.

Anchor grounding (AGK) and base grounding (BGK) of all towers are recommended by E.I.A. and Rohn Manufacturing Co. However, grounding is not included in tower prices. See appropriate price list for grounding prices.

Above prices apply to shipments East of the Rocky Mountains. For shipments West of the Rockies, add \$6.00 per 10 ft. of tower height.

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PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

(Replaces D-78470)

REFERENCE PRICES & INSTALLATION INFORMATION  
#45 Bracketed Towers, NON-GUYED

BASE: The size of the concrete base for a 50' #45 tower, with a house bracket 12' above-ground, is 3' deep by 2' square. For cases of loose soil, etc., the base must be larger. Spread about 2" of gravel in bottom of hole prior to setting base section. After setting base section on gravel, being sure correct end is up, fill another 3" with gravel around legs of base. This allows the tower base legs to extend the required amount below the base of the concrete, thus allowing for drainage of moisture into the gravel. Level the base section as much as possible prior to pouring concrete and repeat the process to make the tower plumb, after pouring concrete. Do not pull base up into the concrete to level it and do not drive it hard into ground, as this plugs leg holes and prevents moisture drainage. Crown the top of the concrete slightly to prevent water accumulation.

HEIGHT OF TOWER & BRACKET USES: House brackets must be used and must be mounted at least 12' aboveground to be effective. The #45 tower should not extend more than 45' above a house bracket. To secure the house bracket, use lag screws no smaller than 3/8" x 2". A special effort should be made to locate the house bracket such that the lag screws go through the siding into a stud. Brackets fastened to the siding only will not hold in a high wind. Tighten the house bracket U-bolts only enough to prevent looseness. Do not dent or flatten the tower upright members by excessively tightening U-bolts.

BOLTS: Installers are urged to use a 10" lining-up punch that tapers from about 1/2" to 5/32" diameter over a 6 1/2" length. If bolts cannot be pushed through the holes with the heel of the hand while rocking the tower, do not hammer them through. Carefully drive the punch into the hole just enough to slightly enlarge it. The leg bolt hole should be just large enough to admit the bolt. Never drill out the holes. Be sure to tighten all leg bolts until they partially flatten the sleeves, causing the sleeves to actually grip the legs inside. Always replace stripped bolts. Upon completing an installation, there should be no vertical movement between tower sections at the joints when the tower is deliberately swayed from side to side.

MISCELLANEOUS: Installation is greatly hastened and simplified by the use of an erection fixture.

All information is based upon antennas with not more than 2 square feet of area, in 20 PSF (70 MPH) wind load and a safety factor, with antenna installed at tower apex.

See Chart B-691119 for more information on non-guyed towers.

DEALER REFERENCE PRICES FOR COMPLETE BRACKETED TOWERS

	30'	40'	50'	60'	70'	80'	90'	100'
#45G	145.00	188.00	231.00	274.00	317.00	360.00	403.00	446.00

Includes top section (A-2), 15" to 24" adjustable house bracket, and required number of standard sections. Prices for above towers are subject to change without notice based upon current individual item prices.

Above prices apply to shipments East of the Rocky Mountain states. For shipments West of the Rocky Mountain states, add \$7.00 per 10 ft. of tower height.

F.O.B. PEORIA, ILLINOIS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

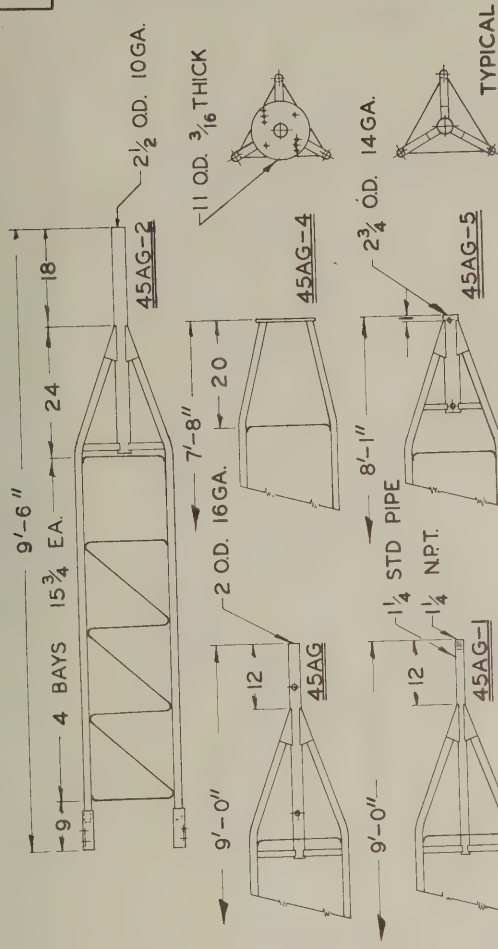


# TOWER SPECIFICATIONS

DISTANCE BETWEEN SIDE RAILS (CENTER TO CENTER)	16 3/4"
OVERALL LENGTH OF SECTION	10'-5"
WEIGHT PER SECTION	70 LBS.
SIDE RAIL DIAMETER AND GAUGE	1 1/4" O.D. 14 GA.
CROSS SECTIONAL AREA - ONE LEG	.3043 Sq. IN.
GROSS ALLOWABLE VERTICAL LOAD ON THE BOTTOM TOWER SECTION	19,440 LBS.
MAXIMUM ALLOWABLE AXIAL COMPRESSION OF THE CROSS SECTION OF ONE SIDE RAIL	6,480 LBS.
MEASURED TENSILE STRENGTH OF ONE SIDE RAIL	19,800 LBS.
MEASURED TENSILE STRENGTH OF ONE BOLTED LEG JOINT	16,200 LBS.
MAXIMUM ALLOWABLE TENSION IN EACH BOLTED LEG JOINT	6,480 LBS.
SAFE MOMENT OF RESTRAINT	7,830 FT. LBS.
L - UNBRACED LENGTH OF SIDE RAIL (DISTANCE BETWEEN CROSSPIECES)	15 3/4"
R - RADIUS OF GYRATION OF SIDE RAIL	.414"
L/R FOR MAIN LEG MEMBER	38.0
WIND LOAD PER LINEAL FOOT OF TOWER AT THE HORIZONTAL WIND PRESSURES (PER SQUARE FOOT OF FLAT SURFACE)	
LISTED BELOW:	
30 LBS.	8.78
40 LBS.	11.70
50 LBS.	14.63

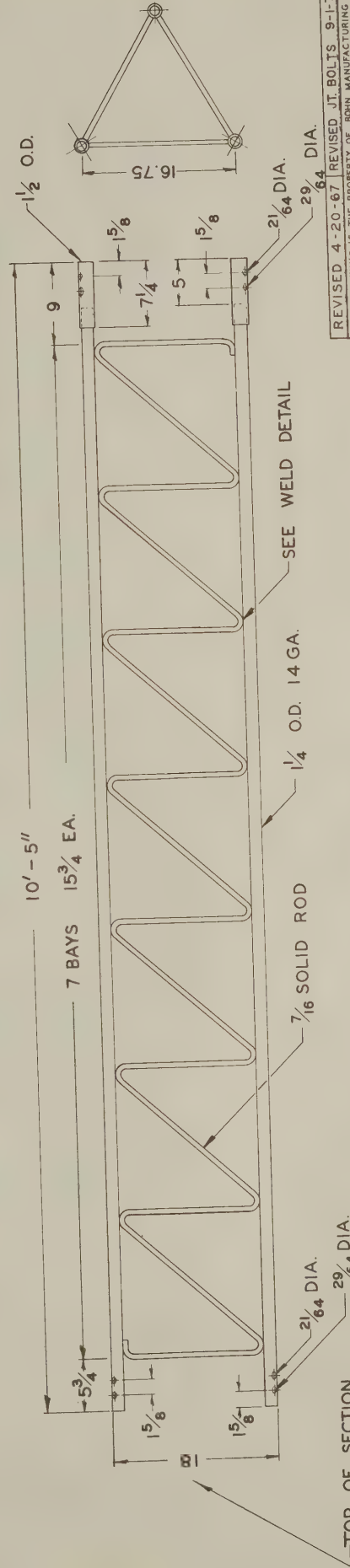
3 - 5/16" DIA. X 2 3/8" L.G., NC BOLTS  
3 - 7/16" DIA. X 2 1/4" L.G., NC BOLTS

NOTE: ALL DIMENSIONS IN INCHES EXCEPT AS NOTED



NOTE: SPECIFICATIONS OF TOP SECTIONS  
ARE THE SAME AS SECTION NO. 45G  
EXCEPT AS NOTED ABOVE.

STANDARD TOP SECTIONS  
SCALE 3/4"=1'

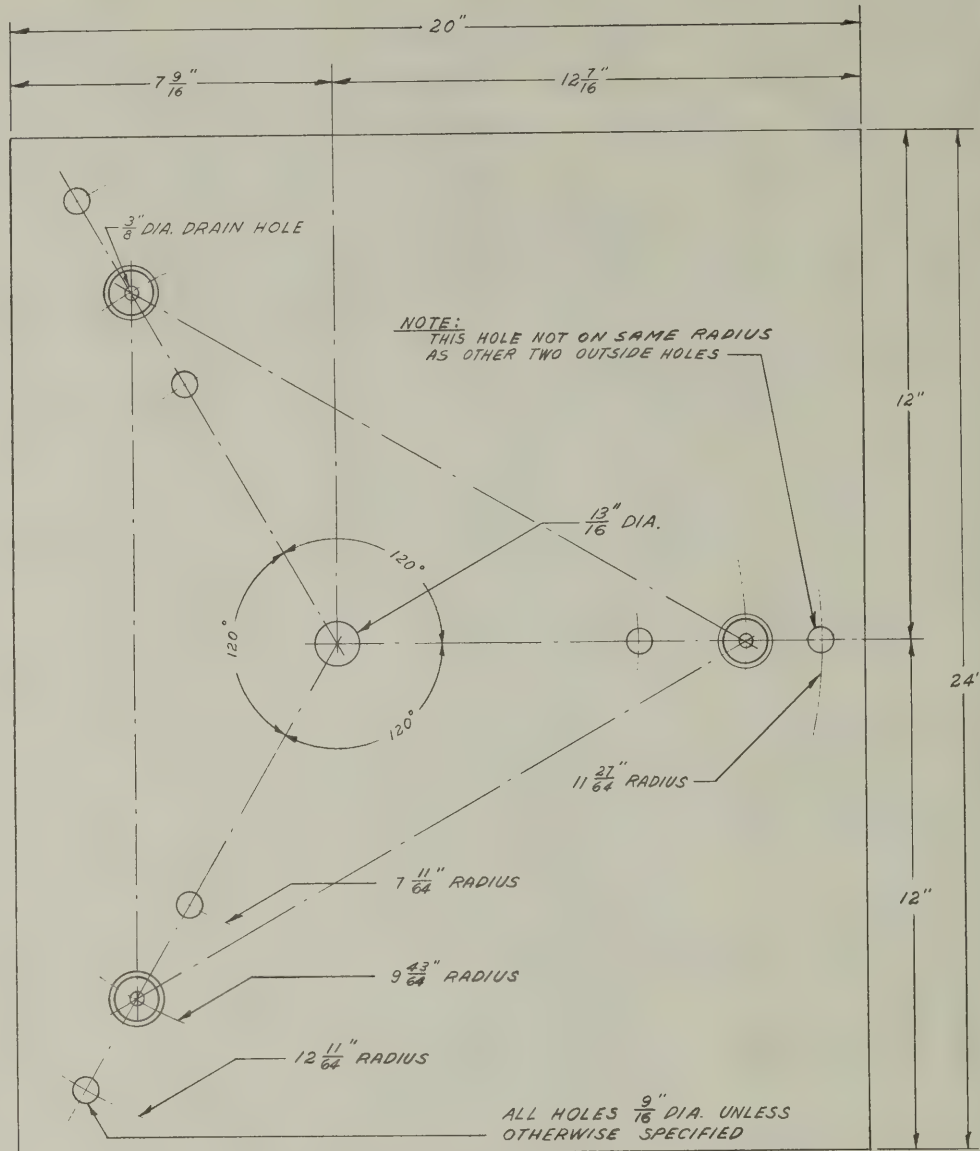


NO. 45G SECTION  
SCALE 1 1/2"=1'

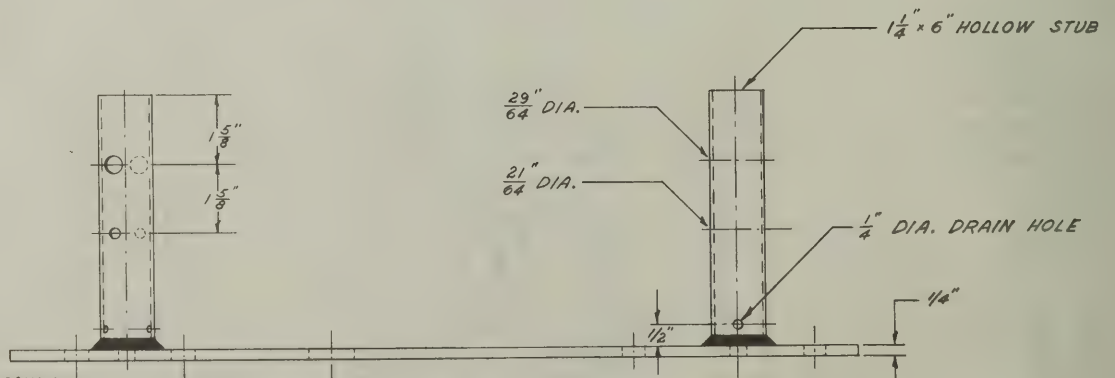
REVISED 4-20-67 [REVISED JT. BOLTS 9-1-71 R-1  
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DRAWN <i>P.M.</i>	CUSTOMER	TITLE
CHECKED <i>ad</i>		
APPROVED <i>DWC</i>		
DATE 6-25-63		
SCALE NOTED		
	MODEL 45 TOWER	SECTION
		DRAWING NO.
	ROHN MANUFACTURING Co.	C-630645-R1
	PEORIA, ILLINOIS	

C-640645-R



DRAWN M. BUENDIA	CUSTOMER	REVISED - 9-14-65		TITLE
CHECKED CEM				
APPROVED (P.A.)				
DATE 6-30-64				
SCALE	ROHN MANUFACTURING Co. PEORIA, ILLINOIS	DRAWING NO.		C-640645R



NOTE:  
AFTER GALVANIZING CHECK DRAIN HOLES  
TO SEE THAT THEY ARE NOT PLUGGED.

BASE PLATE FOR CONCRETE PIER  
(PART NO. BPC-45)

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>EST. WT.</u>
SSV-30	30' SSV tower complete w/1-TT & SB-2	265.00	185.00	288
SSV-40	40' SSV tower complete w/1-TT & SB-2	300.00	208.00	339
SSV-50	50' SSV tower complete w/1-TT & SB-3N	470.00	328.00	538
SSV-60	60' SSV tower complete w/1-TT & SB-3N	500.00	351.00	589
SSV-70	70' SSV tower complete w/1-TT & SB-4N	900.00	628.00	988
SSV-80	80' SSV tower complete w/1-TT & SB-4N	930.00	651.00	1039
SSV-90	90' SSV tower complete w/1-TT & SB-5	1435.00	1004.00	1553
SSV-100	100' SSV tower complete w/1-TT & SB-5	1470.00	1027.00	1604
SSV-110	110' SSV tower complete w/1-TT & 5/8" AB	1860.00	1303.00	1964
SSV-120	120' SSV tower complete w/1-TT & 5/8" AB	1895.00	1326.00	2015
SSV-130	130' SSV tower complete w/1-TT & 5/8" AB	2360.00	1653.00	2509
SSV-140	140' SSV tower complete w/1-TT & 5/8" AB	2395.00	1676.00	2560
SSV-150	150' SSV tower complete w/1-TT & 5/8" AB	2990.00	2093.00	3209
SSV-160	160' SSV tower complete w/1-TT & 5/8" AB	3025.00	2116.00	3260
SSV-170	170' SSV tower complete w/1-TT & 5/8" AB	3635.00	2543.00	3929
SSV-180	180' SSV tower complete w/1-TT & 5/8" AB	3665.00	2566.00	3980
SSV-190	190' SSV tower complete w/1-TT & 3/4" AB	4410.00	3085.00	4783
SSV-200	200' SSV tower complete w/1-TT & 3/4" AB	4440.00	3107.00	4834

NOTE: All towers galvanized after fabrication and designed for 30 PSF wind load. See applicable drawing for allowable antenna load. All SSV sections shipped with leveling shims.

SSV TOWER SECTION, TOP & BASE PRICES

1W	18' welded section, straight	95.00	66.00	116
1W-B	10' welded section, straight	62.00	43.00	65
1W-B-APL	10' welded section, straight, w/support tube & beacon plate	79.00	55.00	85
2W	20' welded section	132.00	92.00	160
2W-B	10' welded section, straight	85.00	59.00	90
2W-APL	20' welded section w/support tube & beacon plate	167.00	117.00	180
2W-B-APL	10' welded section, straight, w/support tube & beacon plate	103.00	72.00	110
2W-ST	20' welded section, straight	167.00	117.00	180
3WN	20' welded section	187.00	131.00	230
3WN-B	10' welded section, straight	116.00	81.00	125
3WN-ST	20' welded section, straight	233.00	163.00	250
4N	20' knock-down section	415.00	290.00	435
4N-B	10' knock-down section, straight	245.00	170.00	250
4N-ST	20' knock-down section, straight	460.00	320.00	480
5N	20' knock-down section	515.00	360.00	540
5N-B	10' knock-down section, straight	285.00	200.00	300
5N-ST	20' knock-down section, straight	565.00	395.00	590
1-TT	Tapered top for 1W or 1W-B	29.00	20.00	18
2-TT	Tapered top for 2W	29.00	20.00	18
3-TT	Tapered top for 2W-B, 2W-ST or 3WN	33.00	23.00	20
4-TTN	Tapered top for 3WN-B, 3WN-ST or 4N	36.00	25.00	21
5-TTN	Tapered top for 4N-B, 4N-ST or 5N	36.00	25.00	23
6-TT	Tapered top for 5N-B, 5N-ST or 6N	40.00	28.00	25
SB-2	4' short base section	43.00	30.00	45
SB-3N	4' short base section	60.00	42.00	65
SB-4N	4' short base section	75.00	52.00	80
SB-5	4' short base section	97.00	68.00	105



SELF-SUPPORTING TOWER  
SSV SERIES

<u>PART NO.</u>		<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>ANCHOR BOLTS FOR SSV SERIES</u>				
(12 required per tower)				
3/8"x18" AB	For sections #1, 2	5.00	3.50	3/4
1/2"x24" AB	For section #3	5.70	4.00	1 1/2
5/8"x30" AB	For sections #4, 5	6.80	4.75	3

ACCESSORIES FOR SSV SECTIONS

Beacon Plates

APL-3W	Beacon plate for 3WN	21.50	15.00	15
APL-4N	Beacon plate for 4N	21.50	15.00	15
APL-5N	Beacon plate for 5N	21.50	15.00	15

Side Arm Bracket

SAB-2-5	Side arm bracket for top antenna mounting alongside beacon for 2W thru 5N	21.50	15.00	13
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Type 1W Side Arm Booms for SSV Sections \*\*

SSV-25-6B	6' boom for Sect. 2 thru 5	86.00	60.00	61
SSV-25-9B	9' boom for Sect. 2 thru 5	114.00	80.00	81

\*\* Boom lengths mentioned above are the total length of the boom. Each boom includes an Antenna Mast Kit w/2" (2-3/8" OD) 3' long standard pipe and hardware, plus kit w/hardware for mounting boom to required section. NOTE: Total required boom length is determined by section number, section width at mounting elevation, and amount of the boom needed as side arm to extend beyond face of tower on one side. (See appropriate drawing for face widths of tower sections and Dwg. C-710348 for boom installation information.)

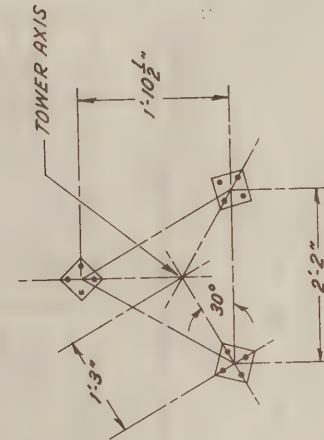
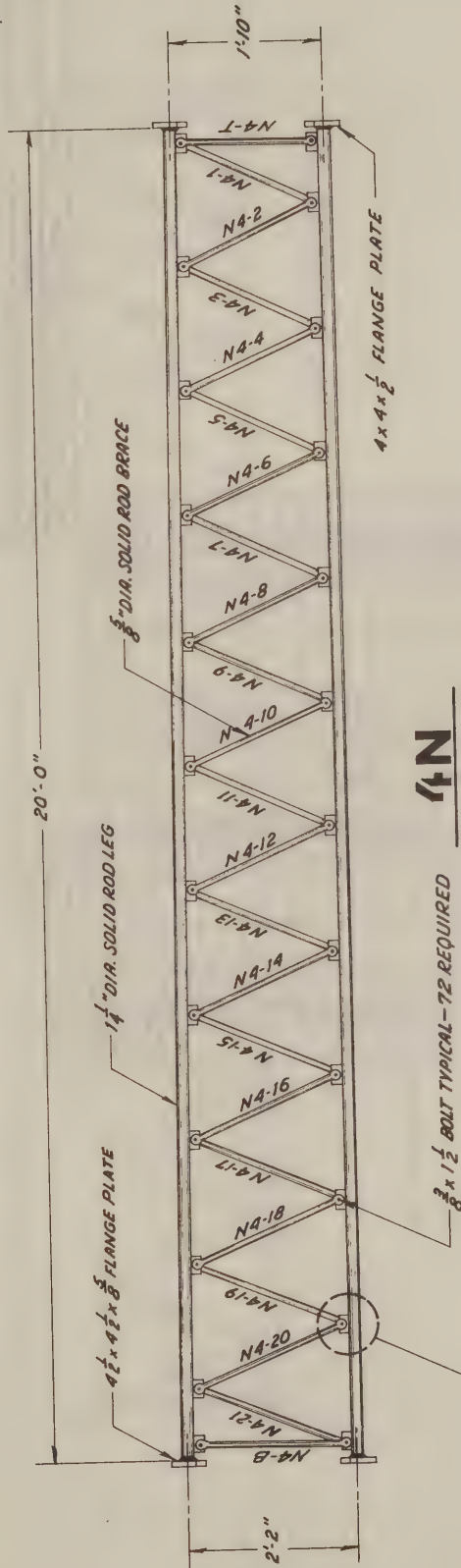
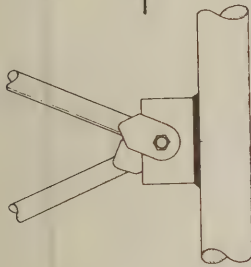
Erection Fixtures

EF-SSV	Erection fixture, 16' long (for use with sections 2 thru 10 only)	322.00	225.00	90
EF-SSV-RH	Erection fixture (same as above) with rotating head	429.00	300.00	100

F.O.B. PEORIA, ILLINOIS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

# BRACING DETAIL



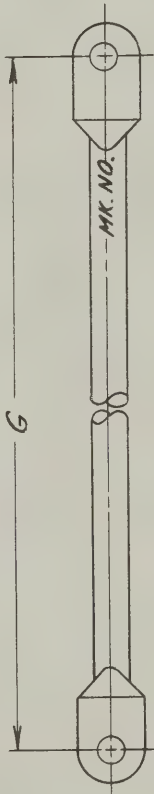
# END VIEW

# IMPORTANT

(2) LEG MARK NO. IS STAMPED AT BASE OF EACH LEG.

NOTES: (1) SEE DWG. NO. SK-710316 R2 FOR SECTION FABRICATION DETAILS.

NO.	DESCRIPTION	DATE	BY
ROHN			
SECTION 4N ASSEMBLY DETAIL			
THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.			
SCALE	DATE	FILE NO.	WT.
NONE	6-4-71		
DESIGNED BY	CHKD BY	DATE	FILE NO.
Q.H.	Q.H.	2-2-71	
ISSUES	OTHERWISE SPECIFIED, DIMENSIONS ARE GIVEN IN INCHES	DATE	FILE NO.
1		2-2-71	
2		2-2-71	
3		2-2-71	
4		2-2-71	
5		2-2-71	
6		2-2-71	
7		2-2-71	
8		2-2-71	
9		2-2-71	
10		2-2-71	
11		2-2-71	
12		2-2-71	
13		2-2-71	
14		2-2-71	
15		2-2-71	
16		2-2-71	
17		2-2-71	
18		2-2-71	
19		2-2-71	
20		2-2-71	
21		2-2-71	
22		2-2-71	
23		2-2-71	
24		2-2-71	
25		2-2-71	
26		2-2-71	
27		2-2-71	
28		2-2-71	
29		2-2-71	
30		2-2-71	
31		2-2-71	
32		2-2-71	
33		2-2-71	
34		2-2-71	
35		2-2-71	
36		2-2-71	
37		2-2-71	
38		2-2-71	
39		2-2-71	
40		2-2-71	
41		2-2-71	
42		2-2-71	
43		2-2-71	
44		2-2-71	
45		2-2-71	
46		2-2-71	
47		2-2-71	
48		2-2-71	
49		2-2-71	
50		2-2-71	
51		2-2-71	
52		2-2-71	
53		2-2-71	
54		2-2-71	
55		2-2-71	
56		2-2-71	
57		2-2-71	
58		2-2-71	
59		2-2-71	
60		2-2-71	
61		2-2-71	
62		2-2-71	
63		2-2-71	
64		2-2-71	
65		2-2-71	
66		2-2-71	
67		2-2-71	
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74		2-2-71	
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76		2-2-71	
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92		2-2-71	
93		2-2-71	
94		2-2-71	
95		2-2-71	
96		2-2-71	
97		2-2-71	
98		2-2-71	
99		2-2-71	
100		2-2-71	



SECTION 4N		SECTION 5N	
MK. NO.	"G"	MK. NO.	"G"
N4-1	21 3/8"	N5-1	24 3/4"
N4-2	21 15/16"	N5-2	25 1/4"
N4-3	22 1/16"	N5-3	25 7/16"
N4-4	22 1/8"	N5-4	25 3/8"
N4-5	22 3/8"	N5-5	25 3/4"
N4-6	22 9/16"	N5-6	25 13/16"
N4-7	22 3/4"	N5-7	26 1/8"
N4-8	22 7/8"	N5-8	26 1/4"
N4-9	23 1/16"	N5-9	26 7/16"
N4-10	23 3/16"	N5-10	26 5/8"
N4-11	23 3/8"	N5-11	26 3/4"
N4-12	23 9/16"	N5-12	26 9/16"
N4-13	23 1/2"	N5-13	27 1/8"
N4-14	23 7/8"	N5-14	27 3/16"
N4-15	24 1/16"	N5-15	27 7/16"
N4-16	24 3/16"	N5-16	27 5/8"
N4-17	24 5/8"	N5-17	27 13/16"
N4-18	24 9/16"	N5-18	28"
N4-19	24 11/16"	N5-19	28 1/8"
N4-20	24 7/8"	N5-20	28 9/16"
N4-21	25 1/16"	N5-21	28 1/2"
N4-7	18 9/16"		
N4-8	22 1/2"		

R.	ADDED MK. NOS. N4-T & N4-B	7/29/71	GLS
NO.	DESCRIPTION	DATE	BY

# REVISIONS

R O H N

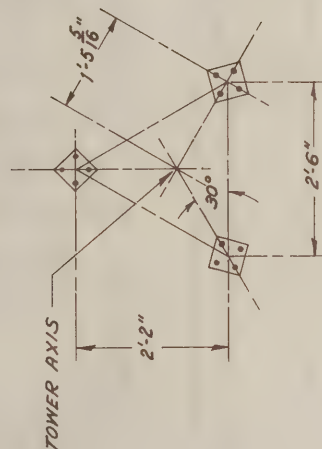
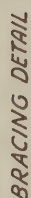
TITLE BRACING DETAIL - GAGE LENGTHS  
SECTIONS 4N & 5N

THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.

FILE NO.

SCALE	MATERIAL	FINISH	WT.
OWN. BY GLS	DATE 6/23/71	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE GIVEN IN INCHES.	
EN'D. BY GLA	DATE 7/24/71	DEC. ±	±
APP'D. DAN	DATE 8-22-71	FRAC. ±	±
		ANGLES ±	±
		DWG. NO. B-710603	R.





MAIN END VIEW

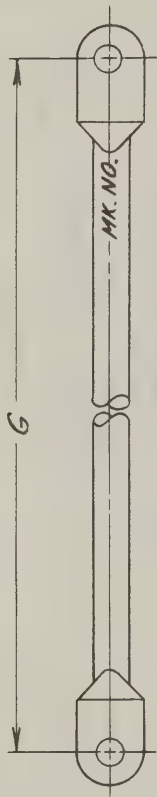
IMPORTANT

(2) LEG MARK NO. IS STAMPED AT BASE OF EACH LEG

NOTES: (1) SEE DWG. NO. SK-710114 R3 FOR SECTION FABRICATION DETAILS

NO.	DESCRIPTION	DATE	BY
REVISONS			
<h1 style="text-align: center;">R O H N</h1> <h2 style="text-align: center;">SECTION 5N ASSEMBLY DETAIL</h2>			
TITLE THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.		FILE NO.	WT.
SCALE	SECTION A1	PT. 5th	
NAME	DATE 6-4-71	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE GIVEN IN INCHES	DWG. NO.
Q.H.	BY 22-57	UNFINISHED	SK-710603
Q.H.	CHK 02-11	1/4" FRAC.	
Q.H.		1/4" ±	
Q.H.		1/4" ±	

1997



SECTION 4N		SECTION 5N	
MK. NO.	'G'	MK. NO.	'G'
N4-1	21 3/8"	N5-1	24 3/4"
N4-2	21 1/16"	N5-2	25 1/4"
N4-3	22 1/16"	N5-3	25 3/16"
N4-4	22 1/8"	N5-4	25 3/8"
N4-5	22 3/8"	N5-5	25 3/4"
N4-6	22 9/16"	N5-6	25 13/16"
N4-7	22 3/4"	N5-7	26 1/8"
N4-8	22 7/8"	N5-8	26 1/4"
N4-9	23 1/16"	N5-9	26 7/16"
N4-10	23 3/16"	N5-10	26 5/8"
N4-11	23 3/8"	N5-11	26 3/4"
N4-12	23 9/16"	N5-12	26 13/16"
N4-13	23 1/16"	N5-13	27 1/8"
N4-14	23 7/8"	N5-14	27 3/16"
N4-15	24 1/16"	N5-15	27 7/16"
N4-16	24 3/16"	N5-16	27 3/8"
N4-17	24 3/8"	N5-17	27 13/16"
N4-18	24 9/16"	N5-18	28"
N4-19	24 1/16"	N5-19	28 1/8"
N4-20	24 7/8"	N5-20	28 3/16"
N4-21	25 1/16"	N5-21	28 1/2"
N4-7	18 9/16"		
N4-8	22 1/2"		

R <sub>1</sub>	ADDED MK. NOS. N4-T & N4-B	7/29/71	GLS
NO.	DESCRIPTION	DATE	BY

REVISIONS

R O H N

TITLE BRACING DETAIL - GAGE LENGTHS  
SECTIONS 4N & 5N

THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.

FILE NO.

SCALE		MATERIAL		FINISH		WT.	
DWN. BY	GLS	DATE	6/23/71	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE GIVEN IN INCHES.			
CHKD. BY	GLA	DATE	6/24/71	TOLERANCES			
APP'D	MAN	DATE	8-22-71	DEC.	±	FRAC.	±
				ANGLES	±		
				DWG. NO.			B-710603 R.

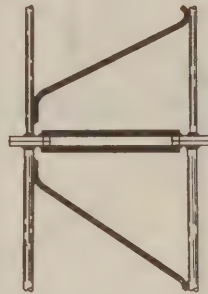
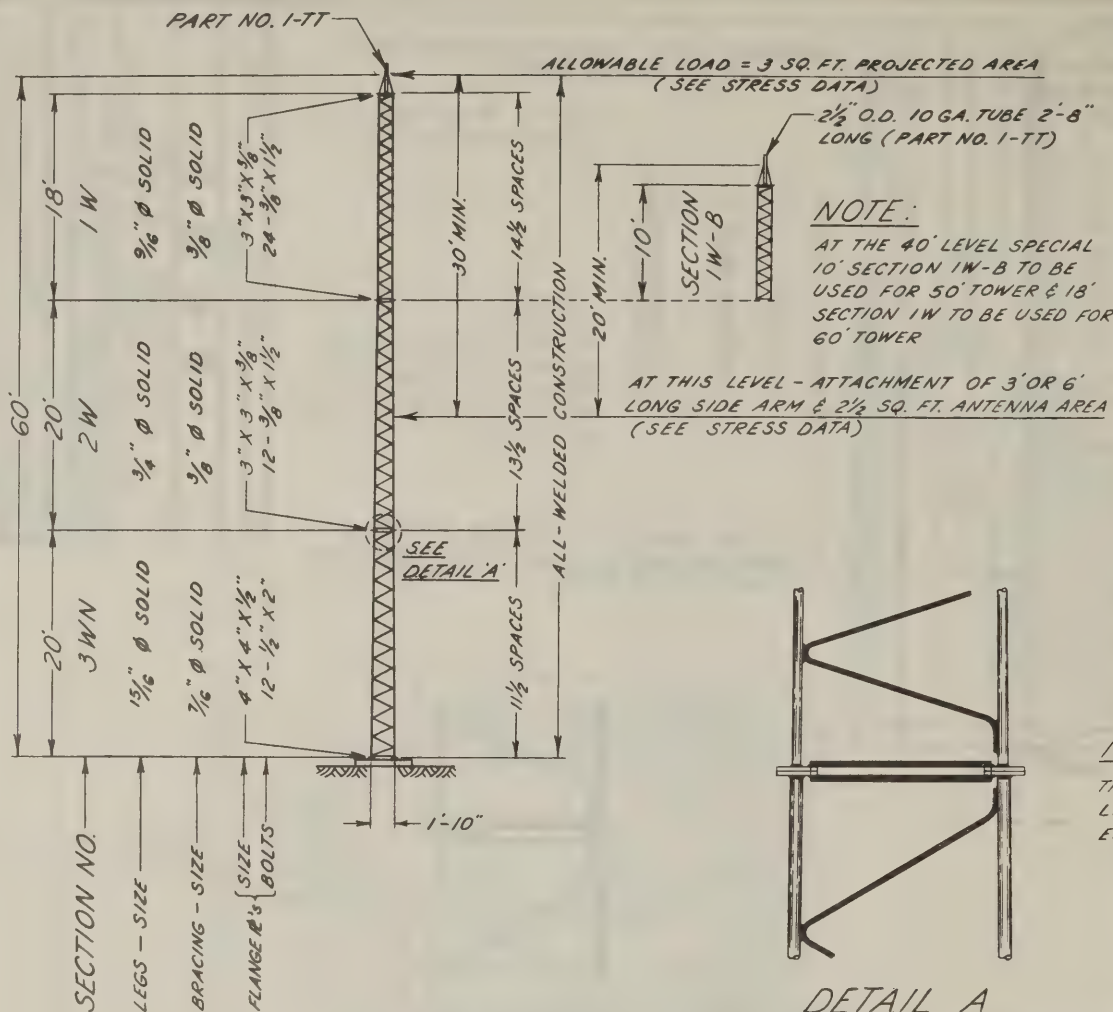


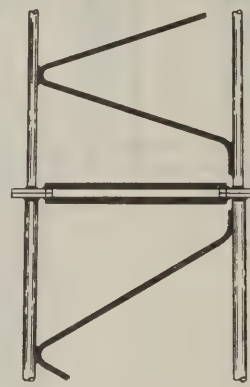
Figure 1 shows a schematic diagram of a rectangular structure. A vertical dashed line runs through the center. A horizontal line is drawn across the top. Dimensions are indicated: 2 inches, 6 inches, 3 inches (TYP), and 1-0 inches.

FOUNDATION DETAIL





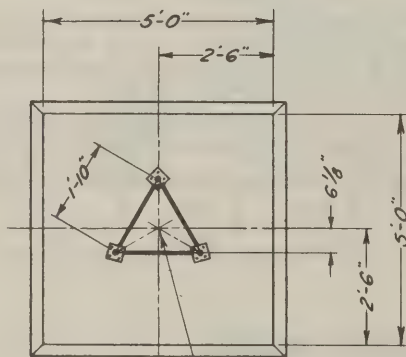
TOWER ELEVATION



DETAIL A

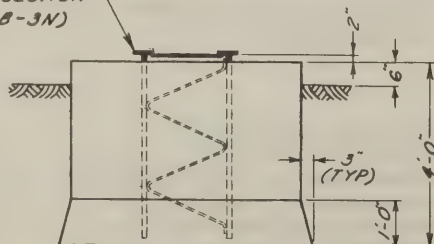
NOTE:

THE USE OF SHIMS TO PERFECTLY PLUMB TOWER MAY BE NECESSARY.



TOWER AXIS AT CENTER OF FOUNDATION

4' BASE SECTION (NO. 3B-3N)



FOUNDATION DETAIL

### STRESS DATA - 30 PSF WIND - E.I.A. STANDARDS

WIND ON TOWER INCLUDING 3 SQ. FT. PROJECTED AREA AT TOP AND ONE SIDE ARM WITH 2 1/2 SQ. FT. ANTENNA AS SHOWN

SECTION NO.	WIND ON SEC. (LBS.)	MAXIMUM LEG STRESS	LEG CAPACITY 50,000 PSI MIN. YIELD STRENGTH	MAXIMUM BRACE STRESS	BRACE CAPACITY 36,000 PSI MIN. YIELD STRENGTH	WEIGHT (LBS.)
1W	205	2,940	3,600	170	700	116
2W	290	7,600	7,600	270	700	160
3WN	170	13,000	13,000	335	930	230

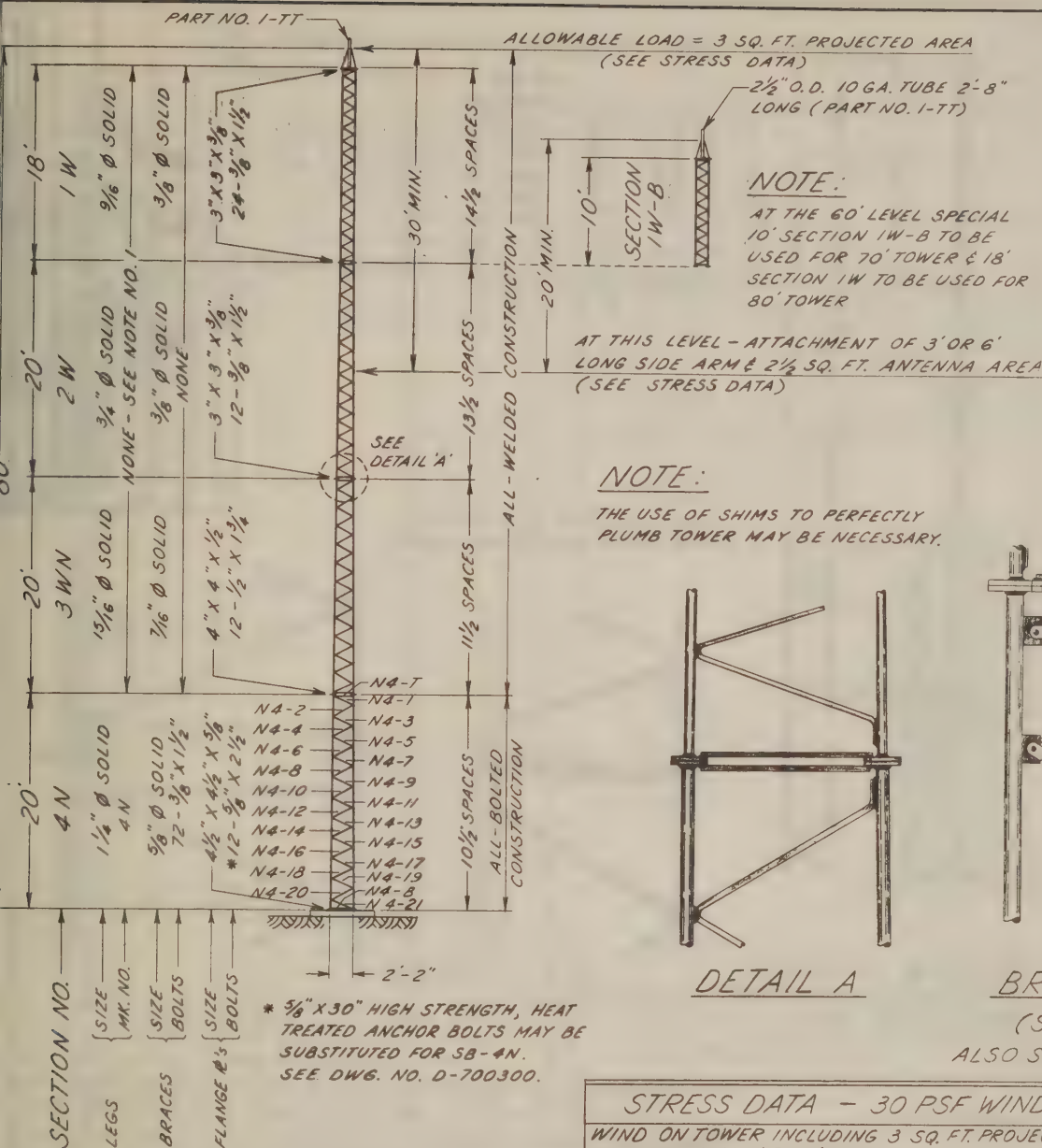
### GENERAL NOTES

1. SECTION NO. IS METAL STAMPED AT THE BOTTOM OF ONE LEG OF EACH SECTION.
2. PAL NUTS ARE PROVIDED FOR ALL TOWER BOLTS.
3. ALL MATERIAL HOT DIPPED GALVANIZED AFTER FABRICATION.
4. ALL BOLTS TO BE A-325 QUALITY.

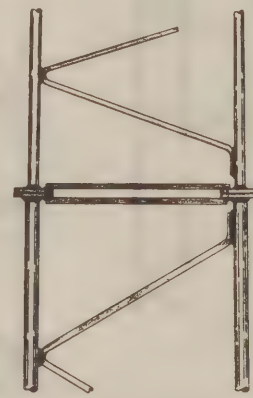
### FOUNDATION NOTES

1. CONCRETE 3,000 PSI MINIMUM ULTIMATE STRENGTH.
2. SHORT BASE TO BE LEVEL BEFORE CONCRETE HARDENS.
3. FOUNDATION DESIGN BASED ON 3,000 PSF SOIL.
4. CONCRETE REQ'D. = 3.8 CU. YDS.

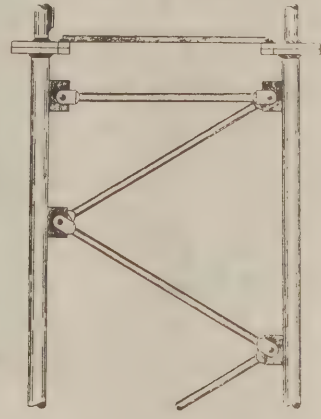
NO.	DESCRIPTION	DATE	BY
REVISIONS			
ROHN			
TITLE ERECTION DETAIL			
50' & 60' MODEL SSV TOWER			
THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.			
SCALE	MATERIAL	FINISH	UNIT
NONE	GLS	3/10/71	INCHES
DATE	APPROVED	DESIGNED	ANALYST
1/7/11			
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE GIVEN IN INCHES			DWG. NO.
			21-210511



NO.	DESCRIPTION	DATE	BY
ROHN			
ERECTION DETAIL			
70' & 80' MODEL SSV TOWER			
FILE NO.			DWG. NO.
THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRACES IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.			CU-710509
SCALE	DATE	INCHES	FEET
1" = 10'	6/16/72	1/4"	10'
1" = 10'	6/16/72	1/4"	10'
1" = 10'	6/16/72	1/4"	10'
1" = 10'	6/16/72	1/4"	10'



DETAIL A



BRACING DETAIL

(SECTION 4.V)

ALSO SEE DWG. NO. B-71. 6.1.7.

STRESS DATA - 30 PSF WIND - E.I.A. STANDARDS						
WIND ON TOWER INCLUDING 3 SQ. FT. PROJECTED AREA AT TOP AND ONE SIDE ARM WITH 2 1/2 SQ. FT. ANTENNA AS SHOWN						
SECTION NO.	WIND ON SEC. (LBS.)	MAXIMUM LEG STRESS	LEG CAPACITY 50,000 PSI MIN. YIELD STRENGTH	MAXIMUM BRACE STRESS	BRACE CAPACITY 36,250 PSI MIN. YIELD STRENGTH (LBS.)	WEIGHT (LBS.)
1W	205	2,940	3,600	170	700	116
2W	290	7,600	7,600	270	700	160
3WN	170	13,000	13,000	335	930	230
4N	220	19,880	21,000	420	** 1,650 (1 1/2" BOLT)	435

\*\* 5/8" Ø SOLID BRACES M1010 STEEL

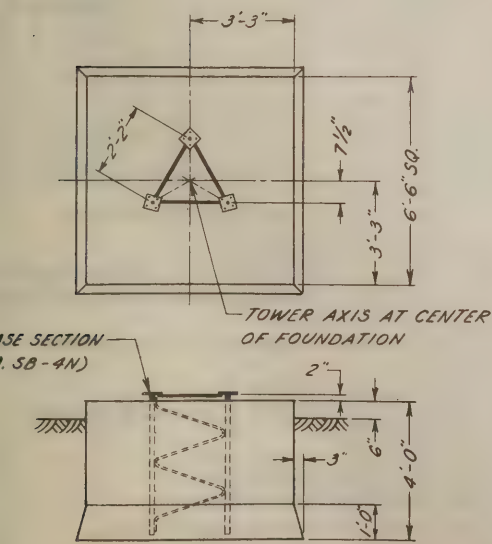
### GENERAL NOTES

1. LEG MK. NO. IS METAL STAMPED AT BOTTOM OF EACH LEG OF EACH BOLTED SECTION. SECTION NO. IS METAL STAMPED AT BOTTOM OF ONE LEG OF WELDED SECTIONS.
2. BRACE MK. NO. IS METAL STAMPED AT ONE END EACH BRACE (BOLTED SECTION ONLY).
3. PAL NUTS ARE PROVIDED FOR ALL TOWER BOLTS.
4. ALL MATERIAL HOT DIPPED GALVANIZED AFTER FABRICATION.
5. BOLTS TO BE ASTM A-325 QUALITY.

### FOUNDATION NOTES

1. CONCRETE 3,000 PSI MINIMUM ULTIMATE STRENGTH.
2. SHORT BASE TO BE LEVEL BEFORE CONCRETE HARDENS.
3. FOUNDATION DESIGN BASED ON 3,000 PSF SOIL.
4. CONCRETE REQ'D. = 6.4 CU YDS.

### TOWER ELEVATION

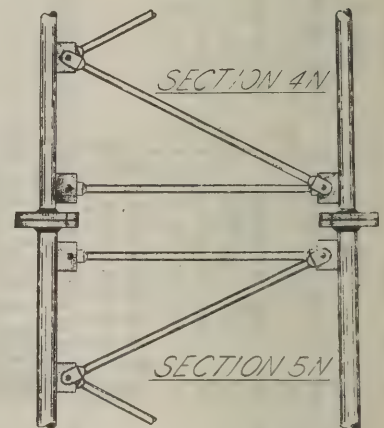


FOUNDATION DETAIL





DETAIL A



BRACING DETAIL  
(BOLTED SECTIONS)

ALSO SEE DWG. NO. 4-7106 (3)

\*\*\*  $\frac{5}{8}$ "  $\phi$  SOLID BRACES MIDIO STEEL.

GENERAL NOTES

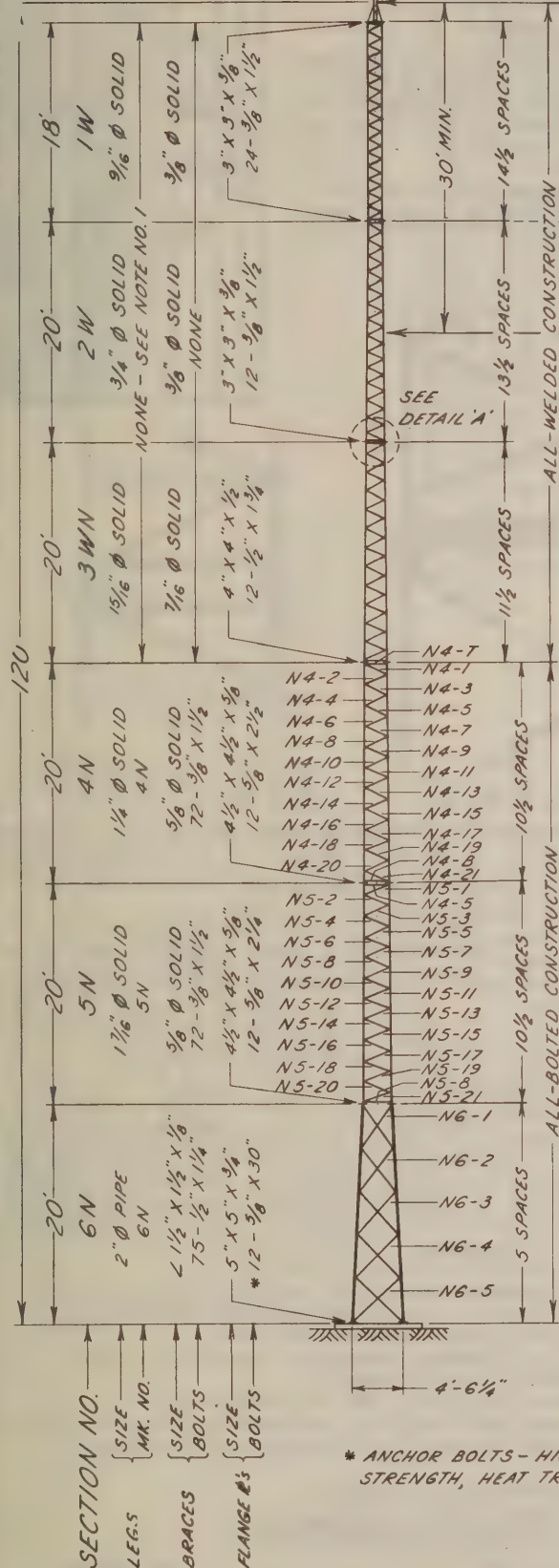
1. LEG MK. NO. IS METAL STAMPED AT BOTTOM OF EACH LEG OF EACH BOLTED SECTION. SECTION NO. IS METAL STAMPED AT BOTTOM OF ONE LEG OF WELDED SECTIONS.
2. BRACE MK. NO. IS METAL STAMPED AT ONE END EACH BRACE (BOLTED SECTIONS ONLY).
3. PAL NUTS ARE PROVIDED FOR ALL TOWER BOLTS.
4. ALL MATERIAL HOT DIPPED GALVANIZED AFTER FABRICATION.
5. BOLTS TO BE ASTM A-325 QUALITY.

FOUNDATION NOTES

1. CONCRETE 3,000 PSI MINIMUM ULTIMATE STRENGTH.
2. SHORT BASE TO BE LEVEL BEFORE CONCRETE HARDENS.
3. FOUNDATION DESIGN BASED ON 3,000 PCF SOIL.
4. CONCRETE REQ'D. = 8.5 CU YDS.



ALLOWABLE LOAD = 3 SQ. FT. PROJECTED AREA (SEE STRESS DATA)



\* ANCHOR BOLTS - HIGH  
STRENGTH, HEAT TREATED

TOWER ELEVATION

-2 1/2" O.D. 10 GA. TUBE 2'-8"  
LONG (PART NO. 1-TT)

NOTE:

AT THE 100' LEVEL SPECIAL  
10' SECTION 1W-B TO BE  
USED FOR 110' TOWER & 18'  
SECTION 1W TO BE USED FOR  
120' TOWER

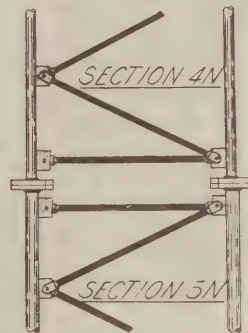
AT THIS LEVEL - ATTACHMENT OF 3' OR 6'  
LONG SIDE ARM & 2½ SQ. FT. ANTENNA AREA  
(SEE STRESS DATA)

NOTE:

THE USE OF SHIMS TO PERFECTLY PLUMB TOWER MAY BE NECESSARY.



DETAIL A



BRACING DETAIL  
(BOLTED SECTIONS)

STRESS DATA - 30 PSF WIND - E.I.A. STANDARDS

WIND ON TOWER INCLUDING 3 SQ. FT. PROJECTED AREA AT TOP AND ONE SIDE ARM WITH 2 1/2 SQ. FT. ANTENNA AS SHOWN

SECTION NO.	WIND ON SEC. (LBS)	MAXIMUM LEG STRESS	LEG CAPACITY 50,000 PSI MIN. YIELD STRENGTH	MAXIMUM BRACE STRESS	BRACE CAPACITY 36,000 PSI MIN. YIELD STRENGTH	WEIGHT (LBS.)
1W	205	2,940	3,600	170	700	116
2W	290	7,600	7,600	270	700	160
3WN	170	13,000	13,000	335	930	230
4N	220	19,880	21,000	420	** 1,650 (3/8" BOLT)	435
5N	245	26,580	27,000	525	** 1,650 (3/8" BOLT)	540
6N	540	22,020	25,300	70	3,000 (1/2" BOLT)	480

\*\*\* 5/8" Ø SOLID BRACES M1010 STEEL

## GENERAL NOTES

1. LEG MK. NO. IS METAL STAMPED AT BOTTOM OF EACH LEG OF BOLTED SECTIONS. SECTION NO. IS METAL STAMPED AT BOTTOM ONE LEG ONLY OF WELDED SECTIONS.
2. PAL NUTS ARE PROVIDED FOR ALL TOWER BOLTS.
3. ALL MATERIAL HOT DIPPED GALVANIZED AFTER FABRICATION.
4. BRACE MK. NO. IS METAL STAMPED AT ONE END OF EACH BRACE (BOLTED SECTIONS ONLY)
5. STEPBOLTS ARE PROVIDED ON ONE LEG ONLY OF SECTION 6N.
6. BOLTS TO BE ASTM A-325 QUALITY.

## REFERENCE DRAWINGS

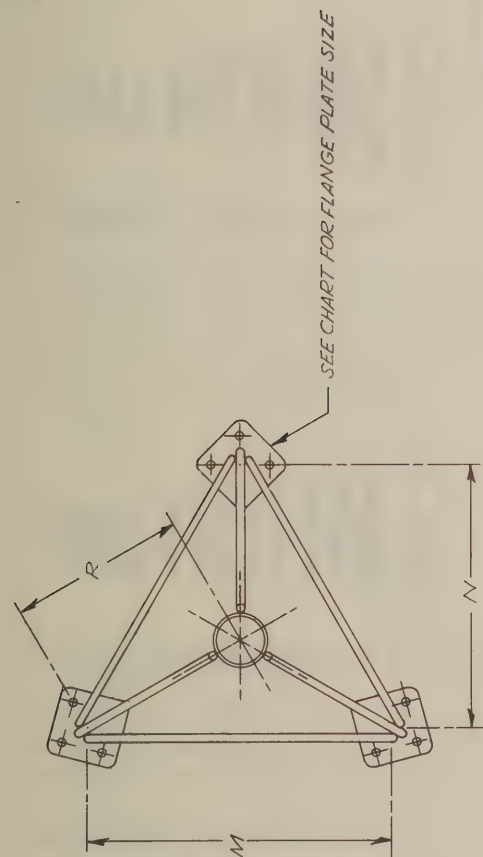
BRACE INSTALLATION DETAIL (SECTION 6N) ——— SK-680816  
BRACE GAGE LENGTHS (SECTIONS 4N & 5N) ——— B-710603R  
FOUNDATION DETAIL ——— D-700300  
STEPBOLT DETAIL ——— B-651264

NO.	DESCRIPTION	DATE	BY
REVISIONS			
TITLE ERECTION DETAIL 110' & 120' MODEL SSV TOWER		FILE NO.	
THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.		FINISH	WT.
SCALE	MATERIAL	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE GIVEN IN INCHES	
AS SHOWN BY	GLS	TOL.	DWG. NO.
DATE	6/17/71	TOLERANCES	CU-710505
BY	1-NM	FRAC	
DATE	6/22-71	± ± ±	

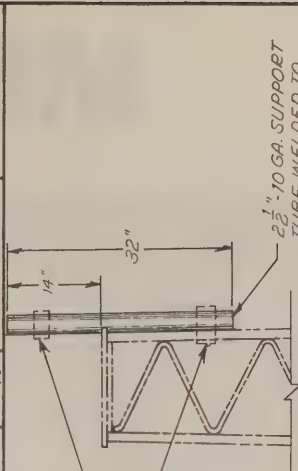




ITEM	QUAN.	MARK NO.	DESCRIPTION	DWG. NO.
------	-------	----------	-------------	----------



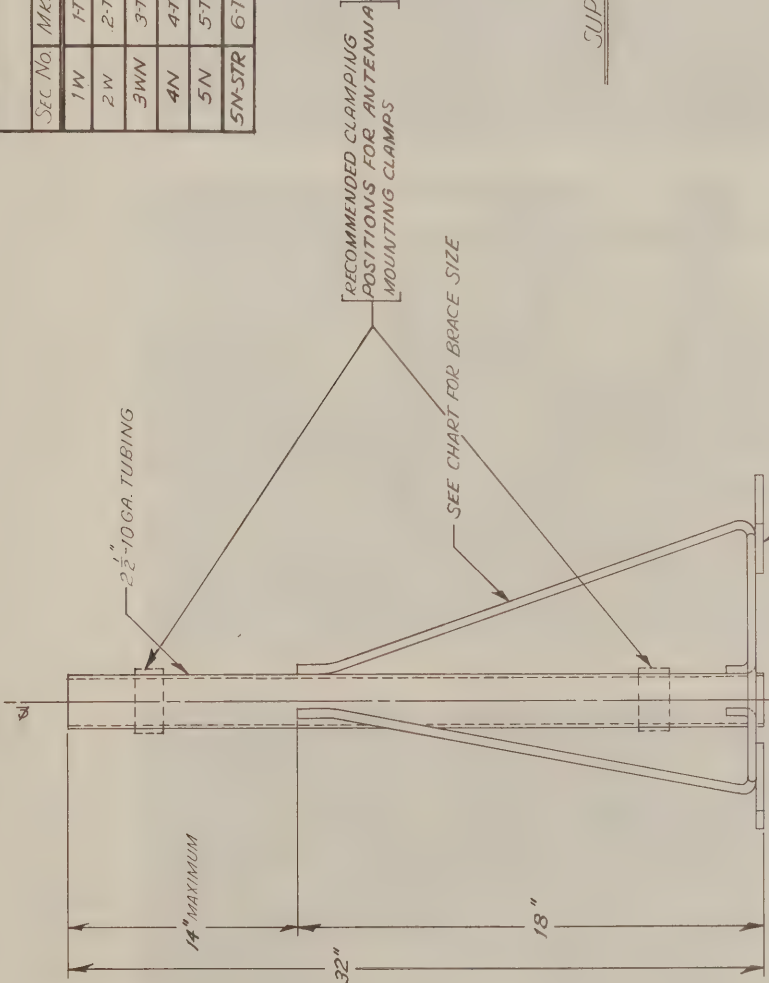
TAPERED TOP DETAILS				
SEC. NO.	MR. NO.	M	N	R
1W	1-TT	1'-2"	1'-0 1/8"	0'-8 1/8"
2W	2-TT	1'-2"	1'-0 1/8"	0'-8 1/8"
3WN	3-TT	1'-6"	1'-3 1/8"	0'-10 3/8"
4N	4-TTN	1'-10"	1'-7 1/8"	*1'-0 1/8"
5N	5-TTN	2'-2"	1'-10 3/8"	1'-3"
5N-STR	6-TT	2'-6"	2'-2"	1'-5 5/8"



SUPPORT TUBE FOR APL SECTIONS - DETAIL

R3	ADDED 6TT REVISED	SEC. NOS	10-7-71 044
R2	DIMENSIONAL REVISION *		9-8-67 044
R1	REVISED MARK NUMBERS		5-20-67 044
NO.	DESCRIPTION	DATE	BY

<b>ROHN</b>			
SUPPORT TUBE DETAILS			
S.S.V. TOWERS			
THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.			
SCALE	NATURAL	FINISH	WT.
DATE	5/15/67	DESIGNED BY	W. J. HASCHKE
DATE	5/11/67	CHECKED BY	W. J. HASCHKE
DATE		APPROVED BY	W. J. HASCHKE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE GIVEN IN		TOLERANCES	
SEC.	FRACTION	ANGLES	
1	1/16	1/2	
2	1/8	1	
3	1/4	2	
4	3/8	3	
5	1/2	4	
6	3/4	5	
7	1	6	
8	1 1/4	7	
9	1 1/2	8	
10	2	9	
11	2 1/2	10	
12	3	11	
13	3 1/2	12	
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95	44 1/2	94	
96	45	95	
97	45 1/2	96	
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99	46 1/2	98	
100	47	99	



WELDED CONSTRUCTION

DESIGN BASED ON THRUST OF 500 #

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DATE	5/15/67	DESIGNED BY	W. J. HASCHKE
DATE	5/11/67	CHECKED BY	W. J. HASCHKE
DATE		APPROVED BY	W. J. HASCHKE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE GIVEN IN		TOLERANCES	
SEC.	FRACTION	ANGLES	
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3	1/4	2	
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99	46 1/2	98	
100	47	99	





# ROHN®

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## Hot Dipped Galvanizing

One of the finest, most modern galvanizing plants in the Midwest. Can handle practically every type, kind and size item. Pickling and oiling available; also centrifugal processing. *Get quotes on your needs now!*

### TANK CAPACITIES

35' x 4' x 6'

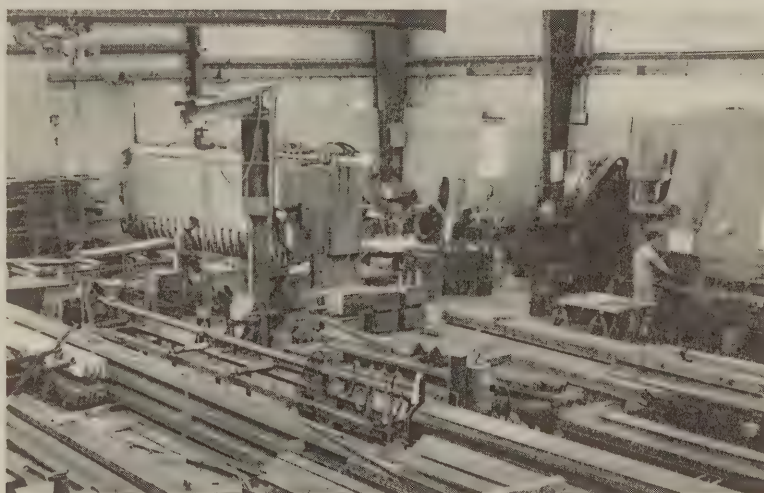
24' x 5' x 6'



**CALL ROHN FOR**

## Steel Fabrication

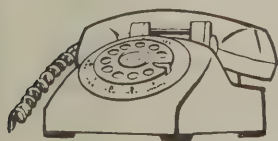
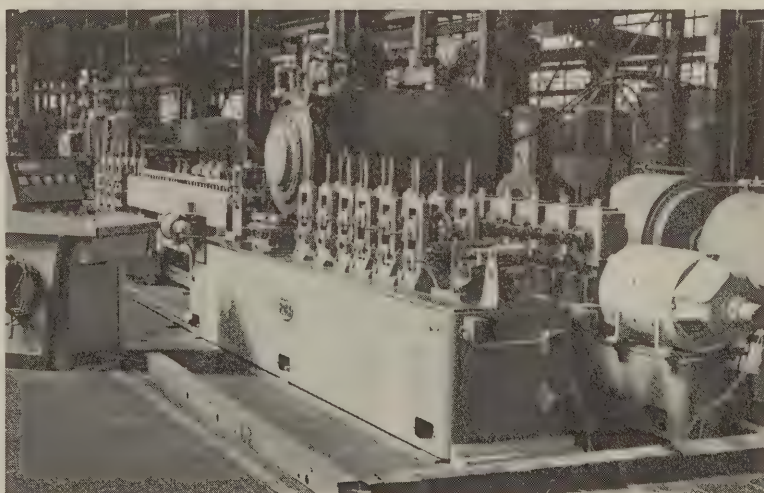
ROHN can fabricate all types of bar, sheet, pipe, tubular and flat steel. Expert craftsmen, low cost and versatile, i.e. can do what you want, when you want it, and how you want it. *Check and see!*



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## Electric Welded Tubing

ROHN is a manufacturer of all sizes and types of black and galvanized electric welded steel tubing. Practically any need can be supplied whether large or small quantities. Immediate service, excellent shipping facilities, fleet of company owned trucks and very competitive prices. *Check NOW and start saving money!*



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## THE PRODUCTION AND PROPERTIES OF GALVANIZED STEEL

Hot dip galvanizing is a process for rust-proofing iron and steel by the application of a coating of metallic zinc. It is a versatile process in that it is applicable to products of nearly all shapes and sizes, ranging from nails, nuts and bolts to large structural assemblies. On all steel parts, galvanizing provides long-lasting and economical protection against a wide variety of corrosive elements in the air, in water, or in the soil.

### Corrosion Resistance of Galvanized Steel

The use of zinc is unique among corrosion-protective methods. The zinc coat serves in a twofold capacity.

**First**—It protects the steel from corrosive attack in most atmospheres, acting as a continuous and lasting shield between the steel and the atmosphere so long as the zinc sheath is unbroken.

**Second**—As a galvanic protector sacrificing itself slowly in the presence of corrosive elements by continuing to protect the steel even when moderate-sized areas of bare metal have been exposed. This last ability results from the fact that zinc is more electro-chemically active than steel.

Of all industrial coating materials, zinc alone possesses this dual ability. With most protective coatings that act only as a barrier, rapid attack commences when exposure of the base metal occurs.



This is what happens at a small exposed area in a coating of tin on steel. Tin merely serves as a barrier until the coating is penetrated. Then, because of electrochemical activities, the steel protects the tin.



This is what happens at a small exposed area in a coating of zinc on steel. The zinc has a greater tendency to go into solution at the hands of the elements than the base metal steel. The zinc is consumed while the steel is protected from any attack.

The distance over which this galvanic protection is effective depends upon the environment. When completely and continuously wet, especially as by a strong electrolyte—e.g., sea water—relatively large areas of exposed steel will be protected so long as any zinc remains. In air, where the electrolyte is only superficially or discontinuously present, such as from dew or rain, the areas of bare steel protected are smaller. Nevertheless, instances are known of galvanized parts exposed out-of-doors which, although severely damaged by misuse, have remained rust-free for many years due entirely to the sacrificial action of the zinc.

Experience has shown that the corrosion resistance of galvanized coatings in the field cannot be predicted from accelerated laboratory tests. According to K. S. Frazier in his portion of the Monograph on Zinc, "Field inspection has shown that the popular service chart (above) is conservative for general usage and numerous individual cases have shown a protection substantially exceeding the periods shown."

A controlling factor in the life of galvanized steel is the sulfur content of the atmosphere. In polluted areas, such as "severe industrial," the normally protective zinc corrosion products tend to be converted to soluble sulfates which are washed away by rain, exposing the zinc to further attack and accelerating the weathering of the zinc.

It should be explained at this point that the amount of zinc on the surface of a galvanized article is measured in ounces per square foot of surface. That is to say, an article bearing a 2-ounce zinc coat has an average of 2 ounces of zinc on each square foot of surface of the galvanized article. This 2-ounce coat is equivalent to a thickness of .0034 inch or 3.4 mils (1 ounce per square foot is .0017 inch or 1.7 mils thick). Note: In the case of galvanized steel sheets the weight of zinc is specified in terms of total zinc on *both* sides of the sheet; i.e., a 2-ounce sheet has 1 ounce of zinc per square foot of surface.

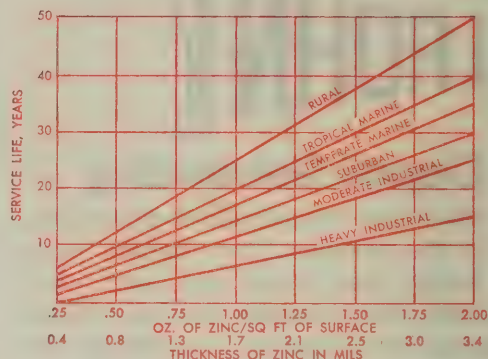
### The Galvanizing Process

The hot-dip galvanized coating is applied by immersing a thoroughly cleaned product in a bath of molten zinc. The zinc used for the coating shall conform to the Standard Specifications for Slab Zinc (Spelter) (ASTM Designation B6) and shall be at least equal to the grade designated as "Prime Western."

As with all metal coating operations, thorough cleaning of the basis metal is essential. Proper preparation of steel surfaces for galvanizing involves three stages—degreasing, scale or rust removal, and fluxing. While practices vary from plant to plant—depending on both need and facilities—the steel must be clean.

If necessary, grease or paint is removed in a hot alkaline or other degreasing bath. After rinsing, the steel is descaled by pickling. Pickling is usually done in a dilute hot sulfuric acid solution (5 to 10 per cent sulfuric acid) to which an inhibitor is frequently added.

Shot or grit blasting may be employed in situations where mill



scale is deeply imbedded in the surface of the steel or where, as in casting, the surface has inclusions of sand particles which are resistant to the normal pickling acids.

After pickling, the material *must be rinsed thoroughly* to rid the surface of residual acid and iron salts. The work is then dipped in an aqueous preflux solution consisting usually of zinc ammonium chloride. This preflux has two functions. First, it coats the work with a thin layer of salt which protects the steel from the air until it is galvanized. Second, it supplements the action of the molten flux blanket which if used, is floating on the zinc bath, by removing any residual oxide and facilitates the wetting of the steel by the molten zinc.

The galvanizing bath is usually controlled at temperatures in the range 830° to 860° F, depending on the type of work being treated.

The fresher and more fluid the flux, the greater is its basic effectiveness and the more readily is it dispelled from the surface of the steel. Because of local chilling action when it enters the bath, the steel invariably carries with it some of the salt, and time must be allowed for the steel to reach the temperature of the bath and for the flux to separate and rise to the surface. During immersion of the article in the zinc bath, a visible bubbling action takes place, resulting from the interaction of the steel, flux, and the molten zinc. The work is usually withdrawn when bubbling subsides and after a preliminary inspection has shown that a continuous coating of zinc has formed.

After galvanizing, the work may be quenched in water or cooled in air. Small parts, such as nuts, bolts, and washers, which are galvanized in baskets in a batch, are usually centrifuged to remove excess zinc before it freezes.

### Structure of the Coating

The usual hot dip galvanized coating has a duplex structure consisting of a layer of iron-zinc alloy phases next to the steel with an outer layer of zinc having the same composition as the galvanizing bath.

It is important to note that the protection afforded depends on the total thickness of the coating and that it is relatively unaffected by the proportions of the alloy and the zinc layers.

The total thickness of the coating as well as the relative amounts of the individual layers which form in the usual hot dip galvanizing process will depend on a number of factors which can be placed in two main categories: composition of the basis steel and galvanizing techniques.

It is generally accepted that the elements silicon, carbon, and phosphorus tend to increase the thickness of the iron-zinc alloy phases. Surface roughness of the steel may also promote alloy layer formation because of the increased surface area exposed to the zinc.

The second main category of variables are those which the galvanizer can control, primarily bath temperature, immersion time, and withdrawal rate. The formation of the iron-zinc alloy is a diffusion process, therefore, higher bath temperatures and longer immersion times will produce heavier alloy layers. Like all diffusion processes, the reaction proceeds rapidly at first and slows down as the layers become thicker.

The thickness of the outer zinc layer is largely independent of immersion time. It depends on the rate of withdrawal and the extent of drain-off. A fast rate of withdrawal of the article from the zinc bath "carries out" more zinc which results in a heavier coating, although the distribution of the zinc layer may become increasingly uneven.

\*Zinc—The Science and Technology of the Metal, Its Alloys and Compounds" edited by C. H. Mathewson, ACS Monograph #142, Reinhold Publishing Corporation, New York, 1959.



Mar. 1, 1972

DEALER CATALOG  
WEST COAST PRICE SHEET

<u>PART NO.</u>	<u>LIST</u>	<u>SUGG'D. DEALER</u>	<u>WT.</u>
<u>Tower Sections</u>			
20G	33.15	23.20	30
20AG	35.50	24.85	26
25G	42.30	29.60	40
25AG	44.65	31.25	31
ST25AG	31.80	22.25	18
25AG-1	48.10	33.65	31
25AG-2	48.10	33.65	31
25AG-3	48.10	33.65	31
25AG-4	48.10	33.65	31
25AG-5	48.10	33.65	31
25TG	66.10	46.25	60
25RG	160.95	112.65	74
<u>Fold-Over Towers</u>			
FK25G	439.30	307.50	355
FK25FG	453.60	317.50	369
FK25G-SBH-1	57.15	40.00	48
FK25G-SBH-2	63.60	44.50	49
FK25G-SAH	42.30	29.60	40
FK25-Hinge	86.45	60.50	56
FK45G	621.45	435.00	518
FK45FG	657.15	460.00	558
FK45G-SBH-1	86.30	60.40	78
FK45G-SBH-2	94.85	66.40	80
FK45G-SAH	71.45	50.00	70
FK45-Hinge	127.85	89.50	100
<u>Service Tables</u>			
TVST-500	34.30	24.00	28
TVST-600	38.70	27.10	30

NOTE: Above prices apply to shipments to the following states: Ariz., Calif., Colo., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo., Alaska, Hawaii, and Alberta, B.C., and Sask., Canada.

F.O.B. RENO, NEVADA - or - PEORIA, ILLINOIS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

WAREHOUSE & BRANCH PRICING  
ON F.O.B. PEORIA ITEMS

All items which are priced F.O.B. Peoria, Illinois and are shipped from a warehouse or shipping point, other than Peoria, will be increased 10% for incoming freight, plus any applicable warehouse fee, and will be F.O.B. shipping point.

This includes the #45, #55, and JJ towers and their accessories, and all other F.O.B. Peoria items.

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

ROHN  
QUESTIONNAIRE FOR SPECIAL TOWERS

Date \_\_\_\_\_

SUBMITTED BY \_\_\_\_\_ Address \_\_\_\_\_

CUSTOMER \_\_\_\_\_ Address \_\_\_\_\_

LOCATION OF SITE: City \_\_\_\_\_ State \_\_\_\_\_

TERRAIN: ☐ Flat ☐ Hilly ☐ Top of Bldg. ☐ Other \_\_\_\_\_  
(Enc. roof plan)

SOIL CONDITION: ☐ Standard ☐ Rock ☐ Swamp ☐ Other \_\_\_\_\_  
(Ordinary soil conditions assumed unless otherwise noted.)

SPACE AVAILABLE: Length \_\_\_\_\_ ft. Width \_\_\_\_\_ ft. Azimuth \_\_\_\_\_  
(80% guy radius assumed unless otherwise noted.)

HEIGHT & TYPE OF TOWER: \_\_\_\_\_ ft. ☐ Guyed ☐ Self-supporting ☐ Bracketed

ANTENNA: Manufacturer & Model No. \_\_\_\_\_  
Frequency \_\_\_\_\_ Projected Area \_\_\_\_\_ Sq. Ft.

Wind Load on Antenna \_\_\_\_\_ lbs. at \_\_\_\_\_ PSF wind load.

(Note: If more than one antenna is to be used, give above information for each,  
plus requirements for side arm length and elevation on tower.)

TRANSMISSION LINE: Manufacturer & Model No. \_\_\_\_\_  
Size (DIAMETER) \_\_\_\_\_ in. Pressurized: ☐ Yes ☐ No

TOWER USE: ☐ AM Radiator  
☐ Mobile Radio ☐ Microwave ☐ FM or TV Antenna Support Transmitting  
☐ FM or TV Receiving ☐ Other \_\_\_\_\_

WINDLOAD REQUIREMENTS (For Towers Under 300 ft.):

☐ EIA Zone A (86.6 MPH true wind velocity) Ice (if any) \_\_\_\_\_ in.  
☐ EIA Zone B (100 MPH true wind velocity)  
☐ EIA Zone C (111.8 MPH true wind velocity)  
☐ Other \_\_\_\_\_ lbs./sq.ft. or \_\_\_\_\_ MPH

ADDITIONAL INFORMATION FOR MICROWAVE

TOWER LOADING:

Reflectors:	Size _____	Location _____	Azimuth _____
	Size _____	Location _____	Azimuth _____
Parabolas:	Size _____	Location _____	Azimuth _____
Other Antennas:	Size _____	Location _____	Azimuth _____
Coaxial Cable:	No. _____	Size _____	Type _____
Waveguide:	No. _____	Size _____	Type _____

RIGIDITY: ☐ Per EIA ☐ Other - Twist \_\_\_\_\_ Deflection \_\_\_\_\_

(Signed) \_\_\_\_\_

SPECIAL INFORMATION: Give any additional, special information that you have, such as:  
Future loadings - type of climbing facility - safety device - any special obstruction  
markings - type of lights required (in conduit, with or without alarm) - special ground-  
ing. Also, show a rough sketch of guying area with all dimensions and position of all  
structures.

4/1/67







# ROHN<sup>®</sup>towers

## Hot Dipped Galvanized Finished

means Extra Value for you

**CORROSION RESISTANT:** Hot-dipped zinc galvanizing means that ROHN Products are absolutely corrosion-resistant. A minimum molten zinc coating of 2 ounces for every square foot of surface fuses permanently to the metal, becoming an actual part of the steel so it cannot be separated. Also the tubular steel used in ROHN Towers is coated both *inside* and *outside* to give absolute protection against deterioration from condensation and moisture.

**CHIP AND SCRATCH PROOF:** If a galvanized surface is scratched or chipped, the sur-

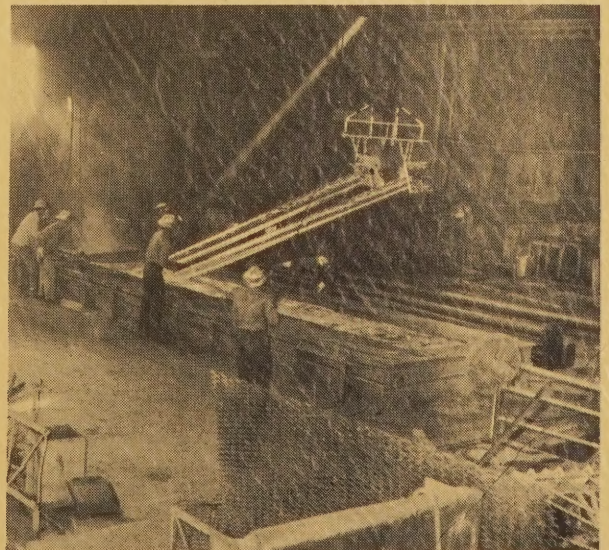
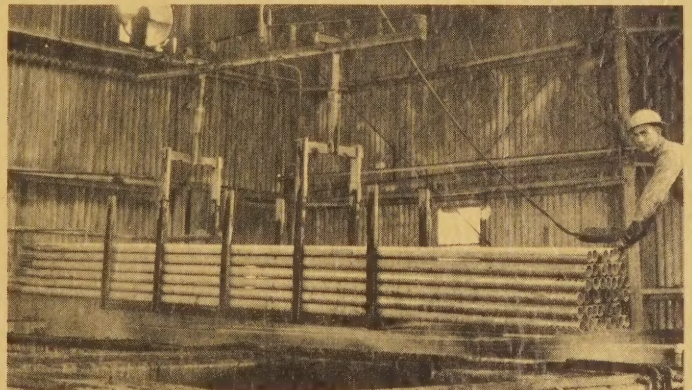
rounding zinc actually "heals the wound" and continues to seal out all corrosive elements! Nothing but hot-dipped galvanizing does this.

**PERMANENT DURABILITY:** Galvanizing means permanent protection and attractive appearance that cannot be matched by any other type of coating. With ROHN Products, you receive the *very finest* available—anywhere. All Hot-Dipped Galvanizing is done in the ROHN Galvanizing Plant according to ROHN Rigid Controls for Highest Quality.

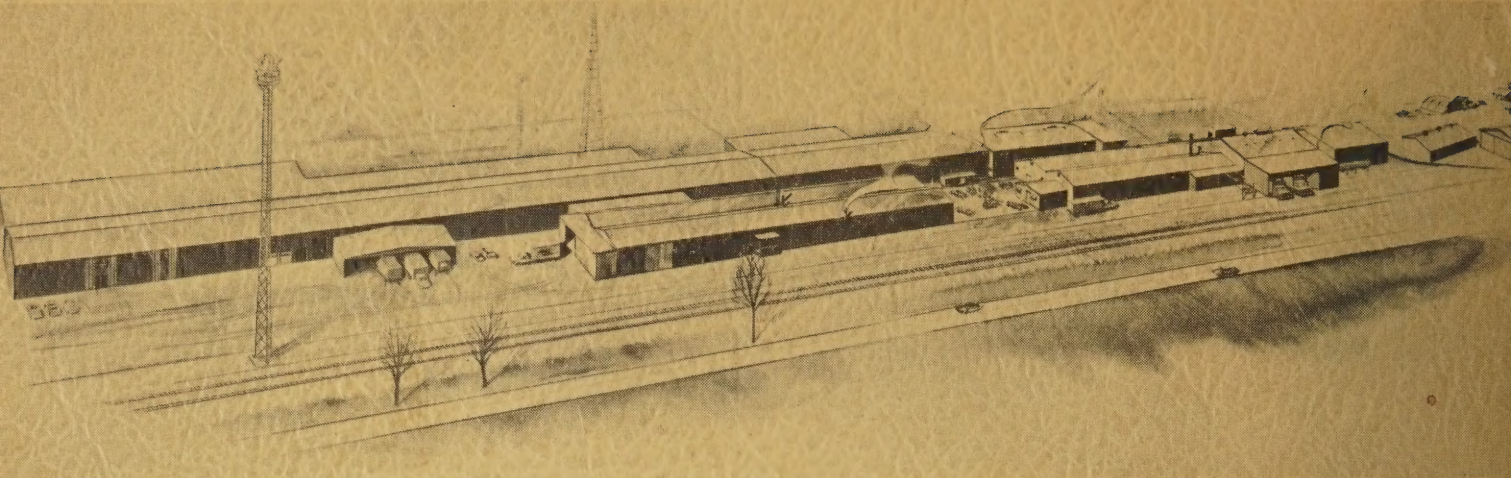
Shown here are the huge pickling vats at ROHN where towers and other ROHN Products are prepared for galvanizing. Modern, high capacity equipment, skilled, experienced operators and finest raw materials keep ROHN quality high.



ROHN tower sections after fabrication are completely immersed in the molten zinc where all welds, points of construction, inner parts, including the interior of the tubing itself — is heavily coated with zinc.





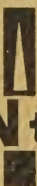


**MODERN, SPECIALLY  
DESIGNED PLANTS  
PROVIDE**

**Manufacturing  
Engineering  
Galvanizing  
Warehousing  
facilities**

**FOR ALL ROHN PRODUCTS**

4 major plants covering a total of approximately 450,000 square feet provide the facilities for producing ROHN products. Modern mass production machinery is utilized throughout these specially designed facilities. Engineering and research departments are maintained in the tower plant to provide the highest possible quality, to check that rigid standards are maintained and to provide the best in design.

**ROHN**  **towers** *Designed and manufactured exclusively by*

**ROHN MANUFACTURING**

Box 2000 • Peoria, Illinois, U.S.A.

DIVISION OF



An impressive fleet of ROHN owned trucks means fast delivery service. Towers are shipped throughout the United States and Canada. ROHN manufactures a complete line of products which means fast, one-stop, one-order service.



#### **THE ROHN COMPANY**

The Rohn Company is one of the pioneer manufacturers of TV towers. The line has been expanded to include heavy-duty communication and microwave towers, as well as a complete line of accessories and allied products. The Rohn Company is the only firm of its kind in the nation making such a full line of equipment of this type—the only manufacturer who has geared its research and engineering to the needs of the future. The line is "up to the minute" in design and in construction—the only one using modern, mass production techniques to improve quality and precision workmanship, yet lower costs. *You can be sure of absolute superiority in the field with the ROHN line of fine products.*

**ROHN factory representatives are located worldwide. Call the one nearest you or write, phone or wire**